

# **WATER DISTRICT AND RIVER AUTHORITY STUDY COMMITTEE**



**Report to the 70th Texas Legislature**

**Volume I**

**December 1986**

WATER DISTRICT AND RIVER AUTHORITY  
STUDY COMMITTEE

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## **Water District and River Authority Study Committee**

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## PREFACE

The Water District and River Authority Study Committee was created by the 69th Legislature to study water districts and river authorities to determine if their powers and duties are appropriate for management of the state's water resources and to determine if the State's role relative to the creation and operations of those authorities should be changed.

From December 1985 to November 1986, the Committee held twelve public hearings across the state. Written and oral testimony was provided by members of the public, representatives of districts and authorities, staff from the Texas Water Commission and Texas Water Development Board, the State Auditor's Office, and the L.B.J. School of Public Affairs.

The Committee made a number of findings regarding the current water resource management structure and the manner in which the State's water resource policy is formulated and implemented. Recommendations to address those findings focused on conservation issues, the competence of local implementing entities, uniform regulation, the need for coordination at the regional level, the importance of groundwater protection, and the need for continuing oversight of the water resource management process.

**Water District and River Authority Study Committee**  
**Report to the 70th Legislature**

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## EXECUTIVE SUMMARY

Texas faces many challenges at this time in its history, but none are more vital to the future of the state than water. Water is essential for urban life and Texas is now third in the nation in population with many great cities. Water is the basic natural resource needed to sustain the state's industrial and agricultural economy. And, the way we use water significantly determines the quality of our environment.

Water resource management is recognized as an issue that ultimately affects the state as a whole and therefore requires a state-focus for policy development and problem solution. Yet, fundamental responsibility for management of the state's water resources is left to numerous local and regional districts and authorities. The role of the State in what has historically been viewed as a problem of local control has evolved slowly and is still in transition. Recognizing this dilemma, the 69th Texas Legislature enacted Senate Bill No. 249 which created the Water District and River Authority Study Committee.

The Committee was formed to examine the existing water resource management structure in the state to determine if it is appropriate for the management of the state's water resources. Specifically, the Committee was charged with

## Executive Summary

determining whether the legislature should make districts and river authorities more accountable to the State, and whether the State should be more involved in the creation and operation of districts and authorities. The Committee found that the existing water resource management structure should be changed to establish State supervisory authority over all districts and authorities, and to provide uniform State regulatory authority needed to effectively address the key water resource management issues of conservation, regionalization, and environmental protection across the state.

Change is needed, but the changes do not require a departure from Texas' traditional approach to solving water resource problems, a tradition based on local initiative for problem solving. Rather, it represents the next step in a historical progression of responses to deal with water resource management problems at a level appropriate to the scope of the problem.

Initially, water management in Texas was under the purview of the individual: if a person needed water, he appropriated it. But as the state's population grew, the scope of water problems soon extended beyond the ability of individuals to resolve. Water was a community resource for irrigation and navigation, and it was a community problem



when flooding occurred. In 1904, the State became involved in water issues for the first time when it allowed for the creation of water districts to finance and implement local projects where there existed a shared responsibility for local water resources.

Texas' population continued to grow and it soon became evident that an entity with broader powers than local water districts was needed. Solving water problems increasingly depended on the coordination of broader jurisdictions and resources to develop, finance and implement large projects. It became apparent, for example, that the elements of a dependable water project included not only diversion and distribution facilities, but also reservoirs to insure a reliable flow of water to divert or to prevent flooding. The necessary reservoir was usually not located within the jurisdictional area of these early districts and so the first regional issues were identified. In 1917, the State adopted Article XVI, Section 59 of the Constitution providing for the creation of conservation and reclamation districts which had the broader powers and financing capabilities necessary to address regional water problems. Under this Article, regional entities were created as the mechanisms to implement solutions to water problems requiring broader coordination than local districts could provide. Beginning after World War I and continuing to the present

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day, many regional entities were created under this Article including river authorities. The river authorities of the state were generally created to serve all or part of a natural river basin in an attempt to provide comprehensive development of the basin water resources. Throughout this period, existing local districts continued to be active and new districts were created. Regional districts and river authorities did not supplant local districts. Rather, they augmented the existing structure by solving those problems which were beyond the capabilities of local districts.

By the 1930's, Texas was well on its way to becoming a major industrialized state, with a growing demand for reliable supplies of water for municipal, industrial, and agricultural use. In the 30-year period between 1910 and 1940, the population in Texas remained predominately rural although the shift to an urban population base was gradually gathering momentum. In 1910, 75% of Texas' population was rural with no city having a population greater than 100,000. By 1940, the rural areas accounted for 54% of the total and by then, 1,000,000 Texans lived in urban areas with populations over 100,000. World War II significantly accelerated industrial development and population shifts and by 1950, urban areas accounted for 62% of Texas' population. This means that in just 10 years, approximately 2,000,000 people

had moved into Texas urban areas resulting in a 66% increase in the urban population.

After World War II, rapid urbanization and industrialization began to significantly change the scope of water resource issues in Texas. The 50 year emphasis on development of water supply had resulted in the creation of an institutional structure comprising local and regional units of government with primary responsibility for planning and implementing water projects. The State role was limited to allocating water rights among users, and there was no basis for developing or implementing a water resource management policy for the state as a whole. Now there were significant water resource management issues in addition to development issues that needed to be addressed. Cities placed tremendous demands on water supplies and required sophisticated and complex water delivery and distribution systems. The increased demand for water supplies shifted the perception of the state's water abundance to one of water scarcity -- a perception reinforced by the drought of the 1950's. Maintaining an acceptable level of water quality in streams was more difficult because of the large number of sewage discharges. And, as major urban centers developed along the Gulf Coast, urban flooding and the protection of bays and estuaries became important water resource issues.

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These issues have evolved over time to include water quality, state-wide planning to support the equitable distribution of water supplies to meet demand, regionalization of facilities, conservation, flood control, and environmental protection. As these issues evolved, they raised significant questions about the ability of the existing institutional structure to respond appropriately to the changing nature and scope of water problems. Water resource issues were no longer confined to localized problems around the state, but were becoming state problems requiring state focused solutions. This change in scope and emphasis has broad implications for expanding the role of state government in solving future water resource problems.

The tradition of limiting the power and authority of state government runs deep in Texas. The role of the State in managing water resources has been shaped by this tradition, and has been only grudgingly expanded to include those functions which clearly could not be accomplished by local and regional units of government. In fact, there have been only two direct delegations of regulatory authority for water resource management in the history of the State.

In 1913, the State assumed responsibility for regulation of surface water rights with the creation of the Texas Board of Water Engineers. The Board functioned to allocate water rights among an expanding number of users to insure

the availability of each user's supply. This initial delegation of authority was modified in 1931 by enactment of the Wagstaff Act which established priorities among different classes of water users. The Board was changed to the Texas Water Rights Commission in 1962.

During the post World War II period, it was recognized that planning of water resource projects needed State participation. This recognition suggested a broader State role in the water resource management process and resulted in the creation of the Texas Water Development Board in 1957. The Board was charged with preparing a comprehensive plan for developing the remaining water resources in Texas and administering State financial assistance programs designed to assist local implementing entities. The State was given no additional regulatory authority by the creation of the Board.

The State's regulatory role remained limited to water rights appropriations and was not expanded until after 1960 - a period of 50 years since the first delegation of authority to the State. By then, rapid urbanization and industrialization were significantly changing the scope of the water resource problem from an emphasis on development of water supplies to include water resource management issues. The first of these management issues to emerge was water quality and concerns for water quality became the basis for the

## Executive Summary

second delegation of authority to the State. In 1961 the Texas Water Pollution Control Board was created to encourage local and regional entities to protect water quality. It was quickly realized that water quality was a state problem and could not be solved by the cooperative efforts of essentially independent local and regional units of government, and so the Pollution Control Board was changed to the Texas Water Quality Board and given the authority to regulate activities which could impair the quality of Texas' rivers and streams.

In 1977, all three existing State water agencies were combined into the Texas Department of Water Resources. In 1985, the Department of Water Resources was divided into the Texas Water Commission and the Texas Water Development Board. The state is still trying to define what institutional structure is appropriate to manage limited water resources from a state wide perspective to support sustainable, long term economic growth. Since the 1960's, Texas' water resource management structure has been in transition but no new regulatory authority has been delegated to the State.

Within this context, the Water District and River Authority Study Committee was created to study the various districts and authorities to determine if their powers and duties are appropriate for the management of the state's

water resources and to determine if the State's role relative to the creation and operation of those districts and authorities should be changed. Basically, the charge to the Committee was to examine the existing system of water resource management and the State's role in that system in the context of the water resource issues facing the state today and in the future.

The primary finding of the Committee on which all of its recommendations are based is that the existing system of water resource management is not appropriate to the task of providing the solutions to water resource problems that is essential to the future of the state. The era of water development is over in Texas and we must change our institutional structure to respond to the future--the era of water resource management.

This new system will require a significant expansion of State regulatory authority, to insure that the critical water resource management issues are addressed from a state perspective. The Committee has recommended specific ways that State authority should be expanded to provide a basis for equitably sharing scarce ground and surface water supplies, protecting both surface and ground water quality, requiring more efficient use and conservation of water, and providing environmental protection and maximizing the use of limited financial resources by identifying and building the

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right projects. The Committee recommendations are listed below and are described in more detail in the full Committee report.

1. Recognizing that water conservation programs are a critical part of a water resource management program, the Committee recommends that appropriate regulation be developed to provide for improved water use, re-use, and reduced consumption of water as an objective of water resource management throughout the state.
2. Recognizing that the current method of implementing water resource projects at the lowest practicable level of government is desirable in Texas and is recognized in the Constitution and laws of the State, the Committee recommends that local entities should continue to be responsible for planning, implementing and operating water resource projects.
3. Recognizing the need to assure that the state's water resources are appropriately utilized in the future, the Committee recommends that all districts and authorities be subject to uniform rules and regulations by the State which take into consideration regional resources and uses, and that appropriate legislation be defined to clarify State authority for this purpose.



4. Recognizing that there are gaps and overlaps within the existing institutional framework of water entities which inhibit effective water resource management in certain areas, and recognizing that these problems may increase in number in the future, the Committee recommends that regional coordinating mechanisms be established under the appropriate State agency to facilitate water resource planning and coordination of programs and projects by local entities in regions of the state where water resource needs are not being addressed.
5. Recognizing that groundwater is an essential component in any comprehensive water resource management plan, the Committee recommends that the State seek authority to impose minimum criteria for regulation of groundwater production on local groundwater management entities and to create management entities where necessary.
6. Recognizing that the issue of water resource management in the state is in transition and that the institutional relationships among water entities in the state need to be re-directed at this time to insure appropriate management of these resources, the Committee sees the need for continuing oversight of the water resource management process in the state, and recommends that an appropriate oversight body be created by the Legislature for this purpose.

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7. Recognizing that all public agencies must be accountable to the people of Texas, the Committee recommends that the legislature require all districts and authorities to adopt policies which would set standards of conduct for their employees, officials, and directors, and which would require clearer and more thorough financial reporting.

## SUMMARY OF RECOMMENDATIONS

1. Recognizing that water conservation programs are a critical part of a water resource management program, the Committee recommends that appropriate regulation be developed to provide for improved water use, re-use, and reduced consumption of water as an objective of water resource management throughout the State.

1.1 The Texas Water Commission and the Texas Water Development Board should adopt uniform regulations requiring applicants for water rights permits from the Commission and applicants for financial assistance from the Board to formulate and submit to the respective agencies conservation plans and to adopt and implement reasonable conservation measures.

1.2 The Texas Water Commission should require all non-exempt surface water diversions to be metered.

1.3 The Texas Water Commission and the Texas Water Development Board should encourage conservation-oriented water rate structures, as part of the conservation plans they are authorized by law to require.

## Summary of Recommendations

1.4 The Texas Water Commission, the Texas Water Development Board, and all districts, authorities, and local water suppliers should promote educational programs to promote water conservation.

1.5 The Texas Water Commission, the Texas Water Development Board, and local entities should work closely together to develop a policy which encourages conservation of water in agricultural uses including the use of an acceptable measuring device at the point water is diverted from its source. This policy should recognize the different characteristics of various water delivery systems.

2. Recognizing that the current method of implementing water resource projects at the lowest practicable level of government is desirable in Texas and is recognized in the Constitution and laws of the State, the Committee recommends that local entities should continue to be responsible for planning, implementing and operating water resource projects.

2.1 The methods for selecting directors for the boards of districts and authorities are appropriate.

2.2 The laws regarding self-insurance by political sub-divisions should be expanded to allow water districts and river authorities to self-insure for the coverage of business judgement related liability on the part of their directors and officers.

2.3 The owners of all dams not meeting the minimum standards required by the Corps of Engineers Phase I testing program should:

- (a) Review the reports on those dams and determine what changes need to be made;
- (b) Report to the Texas Water Commission; and,
- (c) Take any necessary remedial measures as may be directed by the Texas Water Commission.

2.4 Within a reasonable period of time, the Commission should notify the public concerned of dams not meeting the minimum standards required of the Corps Phase I testing program.

3. Recognizing the need to assure that the state's water resources are appropriately utilized in the future, the Committee recommends that all districts and authorities be subject to uniform rules and regulations by the State which take into consideration regional resources and uses, and

## Summary of Recommendations

that appropriate legislation be defined to clarify State authority for this purpose.

3.1 The Texas Water Code should be amended to allow the Texas Water Commission to adopt uniform regulations regarding the use of state resources which apply to all water rights permits and all water quality discharge permits. The Commission should be authorized to promulgate these regulations for the purposes of promoting water conservation, encouraging the development of regional systems, and protecting the environment.

3.2 The continuing right of supervision over districts and authorities delegated to the Texas Water Commission should be made to apply to all districts and authorities in the state.

4. Recognizing that there are gaps and overlaps within the existing institutional framework of water entities which inhibit effective water resource management in certain areas, and recognizing that these problems may increase in number in the future, the Committee recommends that regional coordinating mechanisms be established under the appropriate State agency to facilitate water resource planning and

coordination of programs and projects by local entities in regions of the state where water resource needs are not being addressed.

4.1 The Texas Water Commission and the Texas Water Development Board should jointly appoint regional advisory committees to examine the problems in those regions of the state where appropriate. The membership of these committees should include public officials and representatives from industry, water entities, conservation groups, and agricultural interests from within a particular region.

5. Recognizing that groundwater is an essential component in any comprehensive water resource management plan, the Committee recommends that the State seek authority to impose minimum criteria for regulation of groundwater production on local groundwater management entities and to create management entities where necessary.

5.1 The Texas Water Code should be amended to authorize the Texas Water Commission to promulgate minimum criteria and enforcement standards for water conservation, production, and water quality and to make all

## Summary of Recommendations

underground water conservation districts subject to these minimum criteria.

5.2 The Texas Water Code should be amended to change the process of adding new territory to an existing district.

5.3 The Texas Water Code should be amended to authorize underground water conservation districts to charge fees in addition to ad valorem taxes.

5.4 Instead of the current limitation on financial assistance, the Texas Water Code should be amended to authorize the State to assume regulation of a critical area where the election for the creation of an underground water conservation district does not pass.

6. Recognizing that the issue of water resource management in the state is in transition and that the institutional relationships among water entities in the state need to be re-directed at this time to insure appropriate management of these resources, the Committee sees the need for continuing oversight of the water resource management, development and regulation process in the state, and recommends that an



appropriate oversight body be created by the Legislature for this purpose.

6.1 The Legislature should create a special oversight committee to provide oversight of all public interests and entities involved in water resources planning, development, management, utilization and regulation at the local, regional and state levels.

6.2 This Oversight Committee should be called the "Texas Water Resources Management Oversight Committee."

6.3 The Legislature should set a reasonable fee to be assessed each district, authority, and entity subject to the oversight by the Texas Water Resources Management Oversight Committee. Such assessment shall be adequate to pay the operating and administrative costs required by the Texas Water Resources Management Oversight Committee.

6.4 In conducting its review, the Oversight Committee should streamline the process as much as possible and keep reporting requirements to a minimum.

6.5 Because the Oversight Committee proposed in 6.1 above would provide more effective and continuous review of districts and authorities, the current laws requiring sunset review of certain districts and authorities should be repealed.

7. Recognizing that all public agencies must be accountable to the people of Texas, the Committee recommends that the Legislature require all districts and authorities to adopt policies which would set standards of conduct for their employees, officials, and directors, and which would require clearer and more thorough financial reporting.

7.1 In lieu of the current requirement that the State Auditor conduct an audit each year on 23 specifically named districts and authorities, the Water Code should be amended to require that all water districts and river authorities, consistent with their enabling legislation, adopt the following:

- (a) A written code of ethics for all employees, officials and directors (including investment personnel).
- (b) A written policy on travel expenditures.
- (c) A written policy on investments which would ensure:

- (1) that all purchases and sales are initiated by authorized individuals and conform to investment objectives and regulations and are properly documented and approved; and
  - (2) that periodic review be made to evaluate investment performances and security of investments.
- (d) Written policies and procedures for selection, monitoring or review and evaluation of professional services.
- (e) A uniform method of accounting and reporting on Industrial Development Bonds and Pollution Control Bonds prescribed by the State Auditor.
- (f) Policies which ensure a better utilization of management information:
- (1) Budgets for use in planning and controlling costs;
  - (2) A functioning audit committee of the governing board; and
  - (3) Achieve greater uniformity in reporting:
    - \* using Audits of State and Local Governmental Units as a guide on audit working papers; and
    - \* using Governmental Accounting and Financial Reporting Standards.

## Summary of Recommendations

7.2 In addition to the requirements in 7.1 above, the Water Code should provide that:

- (a) All districts and authorities file annual audits with the State Auditor for review and comment, and that the State Auditor's comments be filed with the Legislative Audit Committee and the governing board of the district or authority; and
- (b) The State Auditor may audit the financial transactions of any district or authority if the State Auditor determines that such an audit is necessary.

## INTRODUCTION

The 69th Legislature passed a number of bills relating to water resources management in Texas. Among these was Senate Bill 249 which reorganized the Texas Department of Water Resources and also created the Water District and River Authority Study Committee (Committee).

Under this legislation, the Committee was directed to study water districts and river authorities created under two articles of the Texas Constitution: Article III, Section 52, and Article XVI, Section 59. The purpose of the Committee's investigation was to determine if the powers and duties of those entities are appropriate for management of the state's water resources and to determine if the State's role relative to the creation and operations of those entities should be changed. Specific questions delineated in SB-249 directed the Committee to address (1) whether the legislature should make water districts and river authorities more accountable to the State, and (2) whether the State should be more involved in the creation and operation of districts and authorities.

Committee members were appointed by Governor Mark White, Speaker of the House Gib Lewis, and Lieutenant

## Introduction

Governor Bill Hobby. Governor White appointed the Chairman of the Committee. The Committee members were:

### Appointed by Governor White

Mr. Gerry Pate, Chairman	President of Pate Engineers, Incorporated of Houston
Mr. J. Leard Conner	Governing Board Member, Trinity River Authority
Mr. Juan D. Nichols	Governing Board Member, Sabine River Authority
Mr. Douglas A. Strain	Governing Board Member, Brazos River Authority

### Appointed by Lt. Governor Hobby

Ms. Terry Hershey	Public Member
Senator John T. Montford	28th Senatorial District
Senator John Sharp	18th Senatorial District

### Appointed by Speaker Lewis

Mr. Jim Nichols	President, Freese & Nichols Consulting Engineers
Representative J.W. "Buck" Buchanan	88th District
Representative Ted Robert	36th District

## COMMITTEE ACTIVITIES

The Committee held its first meeting on December 19, 1985. Support for the Committee's charge and purpose was expressed by the Attorney General's office, the Chairmen of the Texas Water Commission and Texas Water Development Board, the State Auditor and the Governor. At a meeting the following month the Committee discussed the scope of its inquiry. The Committee noted that a determination of whether water districts and river authorities were properly managing the state's water resources must occur within the broad framework of State water policy as defined by the Legislature. Policy guidelines were provided by the Legislature, and approved by Texas voters, in House Joint Resolution 6 and House Bill 2. The Committee's work agenda was defined as follows:

1. Evaluate the activities and operations of these districts and authorities to determine if they are effectively implementing the State's water policy.

If areas are identified where the State's water policy is not being effectively implemented by these entities, determine the necessary changes in the State control

## Committee Activities

process for these districts to ensure effective implementation.

### Criteria for Evaluation:

- a. Comprehensive water resources management plan consistent with State policy.
  - b. Water resources development plan consistent with State policy recognizing water supply, water quality and flood control requirements.
  - c. Water conservation plan.
  - d. Allocation and use of financial resources.
2. Evaluate the relative roles and authorities of the Legislature, the Texas Water Commission and County Commissioners Courts in the creation of districts.
  3. Determine if certain districts are actively discharging their duties.
  4. Evaluate the relative impacts of appointed and elected districts' and authorities' boards of directors.



5. Evaluate the scope of powers of underground water districts relative to the appropriation of surface water rights.

The Committee scheduled a series of public hearings to be held across the state. Representatives of river authorities and water districts were invited to present testimony at hearings held in Euless, Brownsville, Tyler, Victoria, Lubbock, San Antonio, and Austin. Comments from the public were also welcomed. A list of the organizations that presented testimony to the Committee is attached as Appendix D.

Requests for specific information were sent to some river authorities and water districts. They were asked to provide information on their water resources development plans, water resources management plans, water conservation plans, board policies or guidelines with respect to water resources management, and financial statements.

In addition to the oral and written testimony submitted by the river authorities and water districts, the Committee staff prepared information regarding the geographical distribution of districts, the locations of reservoirs, aquifers, and authorities' and districts' jurisdictions, and an overview on the creation, powers and duties, and accountability to the State of various types of districts.

## Committee Activities

On the Committee's behalf, the Texas Water Commission contracted with the L.B.J. School of Public Affairs at the University of Texas for a "Policy Research Project" to support and supplement the Committee's inquiry. Graduate students from the L.B.J. School prepared summaries on some of the river authorities. These summaries included information regarding the authorities' creations, locations, governing bodies, activities, facilities, employees, finances, and planning. The Committee staff prepared similar summaries on other river authorities and water districts that presented testimony to the Committee.

The State Auditor's Office provided the Committee with compilations on the river authorities' financial statements for the last three years, and lists of current board members, key employees, and auditors. Two additional reports were provided by the State Auditor's Office to the Study Committee and to the Legislative Audit Committee: "Findings Concerning Fiscal Operations of Water District and River Authorities," and "Review of Financial Audits of Water Districts and River Authorities Performed by Independent Auditors for the 1985 Fiscal Year."

## HISTORICAL PERSPECTIVE

Water in Texas was relatively abundant from the time of the earliest settlement in the humid eastern portion of the state. Significant westward expansion depended on the discovery of aquifers and the irrigation potential they provided.

Texas was still primarily a rural state when, in 1904, the first water districts were established to provide irrigation. Then as now, special districts were established, primarily, as a financing tool. These special districts were created under Article III, Section 52 of the Constitution (See Appendix A). This amendment authorized the formation of special districts for purposes such as flood control, drainage, irrigation, and navigation. The passage of this amendment demonstrated an awareness of the need for water projects that were beyond the financial resources of farmers, ranchers and local entities. Drainage districts were authorized in 1905, while legislation authorizing levee improvement districts and navigation districts was passed in 1909.

As the number of these districts increased, the need for a system to allocate available water among competing water users became apparent. In 1913, the State became involved in the appropriation of water with the creation of

## Historical Perspective

the Texas Board of Water Engineers. Under this agency, the first State program for allocating the state's water resources began to take shape.

Texas experienced severe floods in 1913 and 1914, and the state became increasingly aware of the need for larger projects to prevent flooding, as well as to develop water storage and delivery systems. The limitations on a district's indebtedness, that was included in Article III, was seen as an impediment to addressing these needs. Additionally, there was a need to clearly establish the State's right to regulate water resource management. The State's legal right to regulate and effectuate conservation of natural resources was established by adoption of Article XVI, Section 59 in 1917. (See Appendix A.) This Constitutional amendment authorized the creation of "conservation and reclamation" districts for very broad purposes and removed the limitation on a district's indebtedness that was found in the previous amendment. Under this new constitutional mandate, the types and uses of local districts began to expand. The first fresh water supply districts were created in 1919. Water control and improvement districts were first organized in 1925. Water supply districts were first created in 1933, and underground water conservation districts in 1949.

While water districts were adequate for meeting water need in specific, limited areas, a different kind of entity was needed to implement major flood-control and water storage projects affecting large geographical areas; and to coordinate efforts that affected, or were dependent on, water resources outside the area served by a particular water district. Recognition was given to the importance of coordinating federal, State and local projects conducted within a single river basin. The Brazos River Authority was the first of several authorities created to address the regional development and planning needs of a particular river basin. The 30s, late 40s and mid-50s saw the creation of river authorities in other river basins in the state. (See Appendix B)

As the number and type of water needs increased, decisions about how water would be allocated became more involved. The 1931 Wagstaff Act established the priorities of use the State would follow: (1) domestic and municipal uses, (2) processing (industrial), (3) irrigation, (4) mining and the recovery of minerals, (5) hydroelectric, (6) navigation, and (7) recreation and pleasure. This Act foreshadowed the changing nature of the state's economic development, from one based on agriculture to one based on urban and industrial development.

## Historical Perspective

From time to time there were water problems in the state, but on the whole, water in Texas through World War II could be characterized as abundant. Two major factors combined to alter the view of water abundance. The first factor was rapid urbanization in the post World War II era. Second, the perception of the water problem changed.

As the state underwent rapid urban development, the demand for water increased significantly. Water suddenly shifted from a relatively abundant to a relatively scarce resource even in the humid portion of the state. High plains irrigation had a perceived short term problem and underground water conservation districts were authorized in 1939 to address that problem locally. However, there was not sufficient recognition of the water supply problem state-wide to foster the necessary coalition for a state-focused solution.

From 1950 to 1956, the state experienced the most severe drought in its recorded history. This period of water shortage significantly contributed to the state's changing impression of its water resources. In addition, water quality concerns and flood control problems began to emerge in cities and coastal areas as the state's population increased.

The combination of these two factors, rapid urbanization and increased pressure on the state's water resources,

expanded the focus of water management issues to a state-wide basis. As a result, a number of State water management programs began to develop. The Texas Water Development Board was created in 1957 to administer funds to develop water supplies. In order to address future needs, a planning division was created within the Board of Water Engineers. Because problems of concentrated wastewater effluent required the State to focus on the impacts on receiving streams, the Texas Water Pollution Control Board was created in 1961. By the mid-sixties, the State recognized the need to address water quality issues more systematically and began requiring discharge permits through the Texas Water Quality Board (formerly the Pollution Control Board). The Water Development Fund was increased in 1966 to help address increasing water supply demands and was expanded to include monies for water quality projects. To reflect its primary function, the Board of Water Engineers was renamed as the Water Rights Commission in 1962. Additionally, the Water Rights Adjudication Act was passed in 1967, requiring that Commission to develop a uniform water allocation system. The transition from agricultural to urban use for water districts was substantially accelerated in 1971 by the enactment of the municipal utility district statutes. Flood control, conservation, and the protection of bays and

## Historical Perspective

estuaries were added to the water issues agenda during the seventies.

This expanded view of water resource issues and the continued urbanization of the state combined to create a broader view of water policy and an increased need for coordinated regulatory efforts. Water issues were no longer seen as localized problems, but as state-wide concerns with broad implications for the future. Water issues were not merely problems of resource allocation, but of resource management in the most basic sense to insure sustainable economic growth of the state. The State-level water agencies were reorganized in 1977 in an attempt to address the increasing number of water policy and regulatory issues within one comprehensive agency. The Texas Department of Water Resources was created by combining the Water Development Board, Water Rights Commission and Water Quality Board. The policy making body for the new agency was the six-member Water Development Board, while the three-member Texas Water Commission functioned in a judicial capacity on water matters.

Historically, the objective of the State's water policy had been to serve as a guide for the development, management, conservation, and protection of water resources for the state. While this traditional policy mentioned such things as improved water use efficiency, water conservation,



and protection of surface and ground water quality, there was in reality very little emphasis placed in these areas. The driving force behind the policy was that of developing surface water resources. This continues to be important.

However, in recent years, Texas has experienced changes that have reduced the effectiveness of this traditional approach to development. Changes in the economy and population increases have placed additional pressures on surface water resources, both in terms of supply and quality. In addition, the continued demand for groundwater is resulting in diminishing supplies for agricultural use and is producing significant impacts on urban areas such as land subsidence and increasing flood hazards. Population growth has resulted in increased demands for water and has placed greater stress on limited financial and natural resources. This situation has resulted in a recognition of the need to balance the competing uses for these resources.

In response to this new awareness of limited resources, two major changes have occurred. First, the State water resource management agency was reorganized. This reorganization of the State's management structure occurred in 1985 when two agencies were created from the Texas Department of Water Resources. The Texas Water Commission was established as the regulatory and enforcement agency for water policy programs and directives, while the Texas Water Development

Board was given responsibility for planning and for administering financial programs for water resource development. Second, the State redefined its water policy. The Legislature passed House Joint Resolution 6, which was approved by voters November 1985; and House Bill 2, implementing language for the Constitutional amendment. This policy redefinition recognizes that the state has limited financial and natural resources to meet an increased demand for water, and that the state must maximize the use of its resources. The following items are key elements in that policy redefinition.

- \* Water conservation programs are more critical and are required as a condition of State financial assistance for water-related programs.
- \* The fact that Texas is an urban state is acknowledged and the water resource needs of urban centers are made specific concerns of State water policy through the promotion of regional water supply and wastewater collection and treatment systems.
- \* Environmental considerations must be balanced with other uses for existing water resources.

- \* Critical underground water areas need to be identified, and groundwater sources protected from depletion or pollution.

The State has moved from a focus on developing additional supplies to a focus on protecting available supplies by maximizing use through conservation, promoting cost effective regional systems, and emphasizing the protection of water quality. Figure 1 on page 38 illustrates the evolution in the State's water resource management structure and policy focus that has occurred over the years. Economic and climate factors affecting this evolution are also indicated.

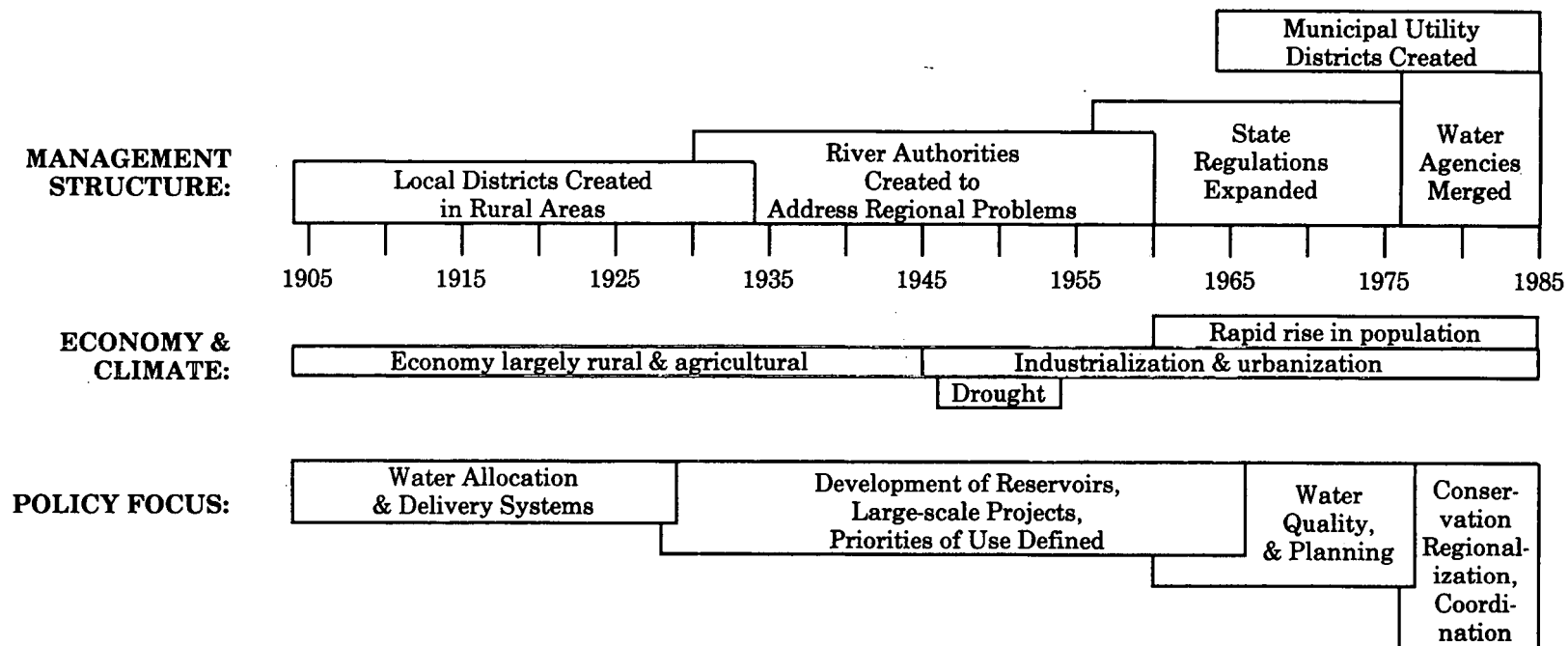


Figure 1

## COMMITTEE FINDINGS

In response to the changing demands upon the state's water resources, both the State water policy and the State system for managing water resources have evolved over time. Although changes in the State's water policy and water management system are closely connected, shifts in each are incremental and are not always driven by the same circumstances. As a result, the State's water policy and system to implement that policy may not always be consistent. For the state to receive the maximum benefit from its water resources, the state's framework for managing water resources must be organized to effectively implement the state's existing overall water policy.

Through a series of hearings held around the state, the Committee examined the existing water resource management framework to determine whether the current system results in a state program that appropriately implements the State's newly defined water policy. Under the existing framework, the present management system consists of a variety of activities conducted by state and federal agencies, river authorities, local districts, counties, cities and private corporations. It is the sum total of these activities and the interaction between them that determines the manner in which water resources are used and managed in Texas.

With the approval of a new Texas Water Plan, a redefinition of the State's water policy has occurred. In addition to the traditional water policy approach of developing an adequate water supply, new elements in the policy have become significant. More than ever before, conservation, groundwater protection, regional systems and environmental protection have become key considerations in the State's new water policy.

After comparing the State's water policy and existing management system, the Committee determined that some gaps and problem areas in the current management system do indeed exist. A description of the current system and the problems associated with it, has been divided into four major functional areas: project implementation, planning, project financing, and regulation of water resources.

**Project Implementation:** Water projects in Texas are generally implemented at the local level. It is primarily the cities, water corporations, water districts, and river authorities that initiate and operate the projects which use or affect the water resources of Texas. These projects cover a broad spectrum of water related operations affecting water supply, flood control, agricultural irrigation, water quality and groundwater protection.

Water supply projects involving the construction of large reservoirs are generally initiated at the local level. While the projects are often federally funded and directed, the size of the reservoir, the use made of the water and the facilities used to divert and transport water are determined in the initial planning stages by local entities before they seek permits or funds. Smaller scale water supply projects are often completely designed, funded and constructed by cities, districts or river authorities.

Projects for the collection, treatment and disposal of sewage and waste are also initially planned and are implemented and operated at the local level. In urban areas, the treatment plants for domestic waste are generally operated by cities or municipal utility districts. In addition, many industries construct and operate on-site treatment plants for waste generated during their industrial processes.

Hazardous waste storage, treatment and disposal facilities are primarily designed, constructed and operated by local corporations or special districts. These projects are intended to prevent groundwater contamination that can result from improperly disposed hazardous waste.

In general, local entities are doing a good job of implementing specific water resource projects. The projects are typically well-constructed and properly operated. As a result, the Committee believes the present system of

## Committee Findings

implementing projects at the local level is appropriate and should be continued. However, the Committee, during the course of their hearings, identified two major areas of concern with the local implementation system. First, the local entities that are implementing these water projects seem to act independently with little coordination between them. As a result, regional problems that require solutions beyond the scope of a single local entity are generally not being addressed in a comprehensive manner. Much of the new focus of the State water policy requires a regional approach, such as groundwater regulation and regionalization of wastewater treatment plants. Without the ability to solve regional problems, the existing management system will be unable to fully address the state's water needs.

Second, there is a little evidence that conservation practices are widespread among the implementing entities. Conservation has become a major element of the State's new water policy. The demands on the water resources of the state will undoubtedly increase in the future. This increased demand will be met by a diminishing supply of water. It has been estimated that projected water needs will meet or exceed available water supply sometime within the next 50 years. Even if all potential water supply projects are developed, the state will have to meet increasing demands for water with decreasing or limited supplies. Further,

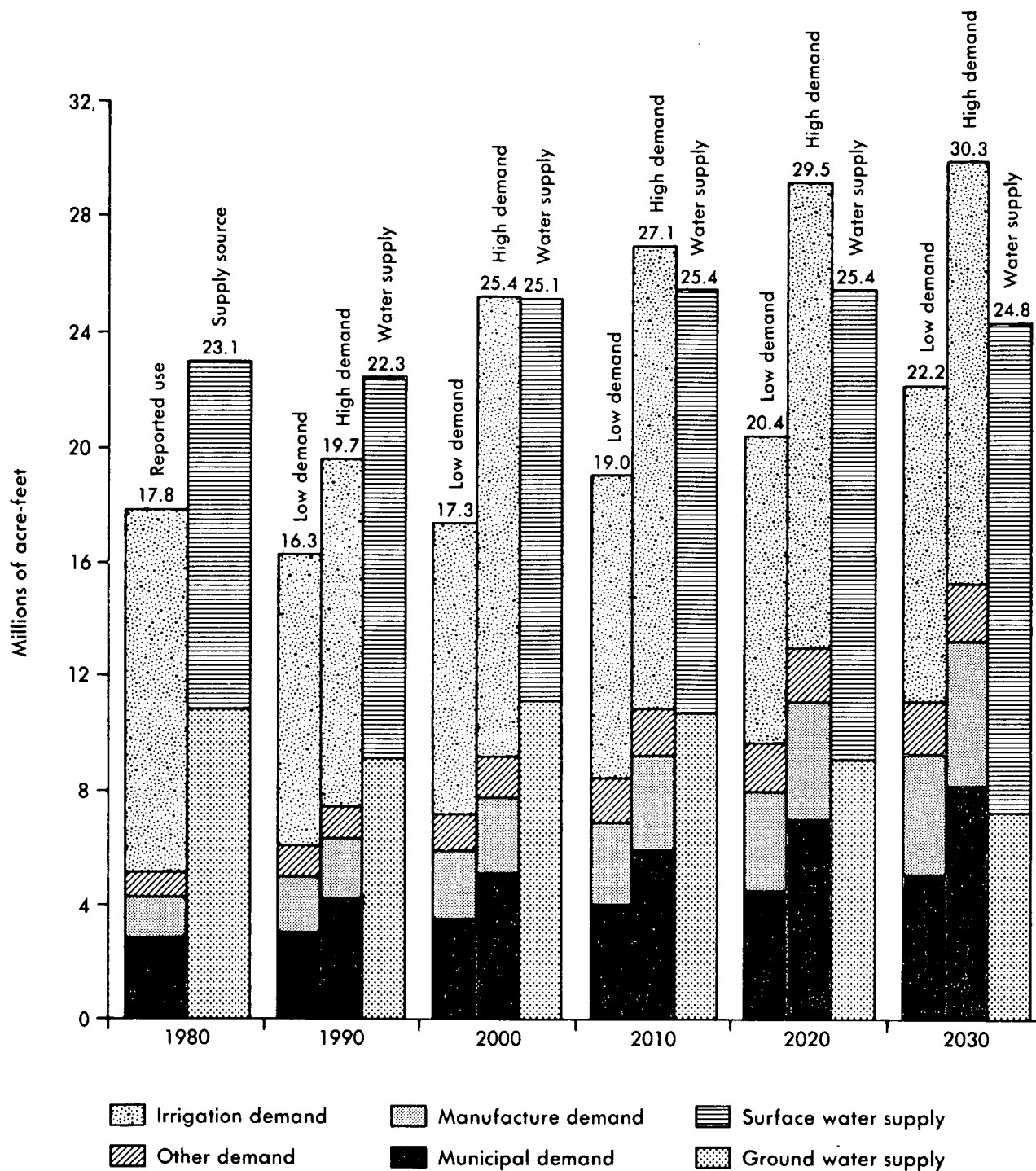


groundwater constitutes a significant portion of the total amount of water used in Texas. Approximately 40% of that water is drawn from non-renewable sources. Figure 2 on page 44 illustrates projected water demand and supply in Texas through the year 2030.

Although the Committee did discover a couple of examples of well executed water conservation programs conducted by local entities such as the Harris-Galveston Coastal Subsidence District and the High Plains Underground Water Conservation District, many examples of practices that did not promote conservation were also observed. In general, irrigation districts serving agricultural water users often transport water through unlined canals and deliver water to customers without metering the amount of water sold. Additionally, rate structures for water sold are usually pegged to a pricing system that is based on the cost of delivery rather than the value of the water as a resource. Also, most local entities delivering water have no comprehensive water conservation plan and do not attempt to educate the public regarding the need to conserve water. The Committee heard testimony that indicated conservation practices were not widely used because of concerns about the possibility of losing water rights.

While the state's water management system has been successful in getting local water projects implemented and

Figure 2



Projected Water Demand and Supply  
Texas

operating smoothly, improvements should be made in the system. Water conservation should become a routine operational goal for all local entities supplying and using water. In addition, the management system should be altered to encourage regional solutions to problems that can best be addressed on a regional basis.

**Planning:** Water resources planning in Texas generally occurs at the local and State levels within the existing management framework. A majority of the planning activities conducted by local implementing entities is related to the development of specific projects to meet identified needs. Planning on the State level, however, is comprehensive state-wide planning designed to convert the State's water policy into concrete goals and objectives that are achievable with available resources.

At the State level, two agencies, the Texas Water Development Board and the Texas Water Commission, perform most of the water resource planning. The Texas Water Development Board is responsible for the Texas Water Plan. The Board evaluates data on projected needs for water and evaluates data on surface and groundwater supply. Data on which this plan is based, is collected by the Board, by the Texas Department of Health, the Texas Water Commission, the U.S. Soil Conservation Service, the U.S. Geological Survey and other agencies. The plan serves as a guide for the

development of additional water resources in the state and suggests various strategies to implement proposed water supply projects. Additionally, the plan establishes broad priorities that support the granting of financial assistance to fund local projects.

The Texas Water Commission has the responsibility for preparing a state water quality plan. The purpose of this plan is to establish a program to protect the water quality of Texas rivers, streams and reservoirs. After an inventory of the state's waters, water quality standards are set for various segments of these rivers and streams in order to protect existing uses of those waters. These standards are subsequently used by the Commission in its regulatory process to establish parameters for wastewater discharge permits.

In general, effective water resource planning is occurring at both the State and local level. The State agencies are doing a good job of setting State priorities for both water supply and water quality. At the local level, specific projects seem to be well planned and implemented. However, when the entire planning effort of the state's water management system is viewed as a whole, two significant gaps in that process are apparent. First, no effective link exists between the local planning process and the established State plans and objectives. The State

planning process is typically one of setting broad guidelines for overall state water policies. Local planning efforts are more specific and project related. Issues relating to the type of facility, the location of the facility, the capacity of the facility and who the facility will serve are addressed at the local level by the entities which conceive and implement the projects. It is only after the initial planning stages of a project are completed and many project issues are already decided that the State participates in the review process for a specific project. As a result, the overall planning process lacks the ability to ensure that constructed projects implement and support the State's water policy.

The second major gap in the water management system's planning process is the lack of regional planning to address regional problems.

The overall picture of water resource management which emerges shows that there are a multitude of localized entities implementing projects across the state. There is little or no evidence of coordination among local entities, or between them and the State, to address regional problems in the initial stages of project planning. The problem of increasing demand for a limited supply of water makes it imperative that planning of water-related projects be coordinated at the regional level in the early stages. Many

of the water problems facing certain areas of the state, such as regionalization of wastewater treatment plants and area-wide conservation measures, are regional in nature and require a regional focus to formulate a solution.

Because of these identified weaknesses in the planning process, the water management system in the state should be expanded to include a regional coordination and planning process in areas that are experiencing regional problems. Such a process would improve the State's ability to ensure that projects constructed support the State's overall water resource management objectives while also addressing appropriate regional needs.

**Financing:** Financing of water projects is provided by the federal, State and local tiers of the current management system, at varying degrees. At the federal level, financing of water resource management projects is available from the Environmental Protection Agency for water quality related projects. Water supply projects have been constructed with assistance from the Federal Bureau of Reclamation and the Army Corps of Engineers (Corps). The Corps has also assisted in financing flood control projects.

On the State level, the Texas Water Development Board makes money available to finance water and wastewater facilities and provides backing for bonds issued by local

entities. Financing provided by the Board may be in the form of grants, or in the form of loans secured by bonds issued by the Board.

Local entities finance the construction and operation of projects by issuing bonds secured by the revenue from those projects, as secured by the payments of property taxes; and, in some instances, by the collection of maintenance and operation taxes.

Although funding assistance for some projects is currently occurring at all three levels of the system, financial resources available for water related projects are limited. Increasingly, the financial burden of constructing and operating projects is being shouldered by the State and local entities. Federal funds for water projects continue to diminish and cannot be relied upon as a viable funding source for many future water projects. The federal budget deficit, the state government fiscal crisis and the downturn in the state's economic condition have all worked to limit the local entities' ability to finance projects.

Along with the increasing demands made on the state's water resources, these increasing demands on the state's financial resources place more emphasis on the other aspects of the state's water management system. With fewer dollars to construct and operate water projects, the planning and regulatory functions of the management system will have to

ensure that the funds expended are used to implement needed projects and that, once constructed, the operation of those projects conserve and protect existing resources.

**Regulation of Water Resources:** The regulation of water resources in Texas occurs at the State, federal and local levels. Figure 3 on page 51 shows general governmental controls and the agencies that exercise those controls. The degree of regulation and the applicability of regulations issued by these governmental levels varies, depending on the subject of the regulation and the particular entity involved.

Regulation at the federal level primarily provides the motivating thrust for State regulation in Texas. Several federal statutes designed to protect water quality and the environment establish the basic guidelines for State water quality regulation. The Clean Water Act, the Safe Drinking Water Act and the Resource Conservation and Recovery Act all have a significant impact on State regulatory programs.

State regulation in Texas is carried out through the activities of several State agencies. This regulation is generally accomplished in two ways. First, through permitting and enforcement procedures, water resources are allocated and protected. Second, local entities are supervised



Figure 3

### Governmental Controls Affecting Surface and Groundwater

	Texas Water Comm.	Tx. Water Development Board	Tx. Department of Health	Railroad Comm.	Soil & Water Conservation	Attorney General	Parks & Wildlife	State Auditor	Legislature	Commissioners Court
Water Use	1	2	3	4	5	6	7	8	9	10
1. Identify critical management areas for underground water conservation.	X	X								
2. Create water districts.	X								X	X
3. Adjudicate water rights.	X					X				
4. Issue surface water use permits.	X									
5. Review plans and specs for water supply projects.	X	X	X							
6. Enforce surface water use permits.	X					X				
7. Monitor surface and ground water use.	X	X	X				X			
Water Quality	1	2	3	4	5	6	7	8	9	10
1. Review groundwater assessment plans.	X									
2. Establish stream standards.	X									
3. Establish wasteload evaluations for streams.	X									
4. Regulate surface mining.				X						
5. Regulate solid waste treatment and disposal.	X		X	X						
6. Regulate quality of drinking water.			X							
7. Certify plant operators.	X									
8. Issue wastewater discharge permits.	X									
9. Issue solid waste permits	X		X	X						
10. Enforce wastewater & solid waste permits.	X		X	X		X				
Conservation	1	2	3	4	5	6	7	8	9	10
1. Require conservation plan before approval of loan for water distribution system.		X								
2. Require conservation plan for water use permit.	X									
Flood Control	1	2	3	4	5	6	7	8	9	10
1. Review plans and specifications for flood control projects.	X									
2. Administer Watershed Protection & Flood Prevention programs.					X					
3. Coordinate National Flood Insurance program.	X									X
Financial Resources Management	1	2	3	4	5	6	7	8	9	10
1. Review feasibility of proposed federal projects.	X						X			
2. Fund acquisition/development of water storage facilities.		X								
3. Fund acquisition/development of water treatment facilities.		X								
4. Provide bond insurance.		X								
5. Invest Development Fund monies.		X								
6. Review bond issues for districts.	X					X				X
7. Supervise water districts.	X									
8. Review financial controls and reports.	X	X						X		

## Committee Findings

by State agencies to ensure that their operations are appropriate.

In the area of permitting and enforcement, several agencies have jurisdiction over water related activities.

The Texas Water Commission is the principal authority at the State level on matters relating to the quality of surface and groundwater. The Commission regulates wastewater discharges into surface waters and protects groundwater supplies by regulating operators of hazardous waste facilities and by cooperating with the EPA to administer federal programs to clean up abandoned hazardous waste sites. The Texas Department of Health oversees the quality of public drinking water systems and oversees the handling and disposal of municipal solid wastes and radioactive materials. The Railroad Commission has jurisdiction over the handling of materials associated with oil and gas production and regulates the drilling and use of wells for oil and gas production activities. The Water Commission is the principal authority on the allocation of surface water, and regulates the use of surface water by issuing permits.

In general, the regulation of water resources through the permitting and enforcement process works well and is an effective tool for resource allocation and protection. However, in examining the ability of State agencies to adequately regulate water resources for full implementation

of the State's water policy, a significant gap in that regulation was apparent. For example, conditions in the state relative to water resources have changed over the years and the State's water policy has been adjusted from time to time to respond to those changes. However, the ability of the Texas Water Commission to regulate persons and facilities that have already received permits from the Commission is unclear in some areas. By way of illustration, statutory authority for the Commission to place additional requirements on existing water rights holders may not exist. As a result, the Commission may be unable to uniformly regulate water supply and water quality projects. For regulation to be effective and to accomplish its intended objectives, regulation must be uniform. Without this ability to adopt regulations that affect all entities implementing and operating water projects, uniform application of conservation measures, efforts to implement regionalization, and policies to protect the environment cannot occur.

The second area of State regulation is supervision of local districts and authorities. These entities are created by the Legislature, the Texas Water Commission and County Commissioner's Courts. A variety of types of districts have been created through this process to conduct different types of water projects. Figure 4 on page 54 shows the number of

Figure 4

ACTIVE, REGISTERED DISTRICTS BY CREATING ENTITY<sup>1</sup>

Type of District	Creating Entity			Total
	Water Commission or Predecessor	Legislature	Commissioners Courts	
Water Control & Improvement Districts	62	94	69	227 <sup>2</sup>
Water Improvement Districts	--	--	18	18
Municipal Utility Districts	478	149	27 <sup>3</sup>	654
Fresh Water Supply Districts	--	7	31	38
Levee & Flood Control Districts	--	6	35	41
Drainage Districts	--	10	34	44
Irrigation Districts	1	1	18	20
Navigation Districts	--	8	18	26
River Authorities	1	19	--	20
Others <sup>4</sup>	<u>4</u>	<u>45</u>	<u>5</u>	<u>54</u>
	546	339	255	1,142 <sup>2</sup>

1. Figures are for registered active districts as of October 2, 1986. There are 113 districts that are active but have not registered with the Water Commission: 8 of these were created by Commissioners Courts, 43 by the Commission, and 62 by the Legislature.
2. Two WCID's were created by cities.
3. These districts were originally of another type. They converted to MUD's, which requires Commission approval.
4. "Others" include underground water districts, 12; and miscellaneous types, 42. Numbers are approximate.

active districts by creating entity. The method of creation determines, in some cases, the regulatory provisions that a local entity is subject to. The districts and river authorities created by the Legislature, or "Special Law" districts, are not always subject to the same statutory provisions as "general law" districts created by Commissioners Courts or the Water Commission.

In addition to the creation process, the Commission also has the authority to review certain district's bond issues and associated projects for economic and engineering feasibility. A summary of the existing State controls on water districts and river authorities is illustrated in Figure 5 on page 56. The Commission also has broad general supervisory authority over some districts to ensure that the activities of these districts as agencies of the state are appropriate. Although the types of supervisory and review activities conducted by the Commission appear to be appropriate, the Commission's authority to look at all districts and authorities is not clear. For the supervisory process to be effective, it should be uniformly applied to all types of districts and authorities. Without this uniform application, the Commission's ability to look at the appropriateness of the entities activities, and to ensure that they are implementing necessary projects, is incomplete.

Figure 5

### Governmental Controls with Reference to Water Districts and River Authorities

	Districts											
	Water Control	Fresh Water	Municipal Utility	Drainage	Levee Improvement	Irrigation	Navigation	Special Utility	Stormwater Control	Water Improvement	Underground Water Conservation	River Authorities
<b>Texas Water Commission</b>	1	2	3	4	5	6	7	8	9	10	11	12
Creation—approval	X		X		X	X		X	X	X	X	
Finances & Projects												
Approves bonds/projects	X	X	X			X		X	X	X	X	
Approves projects					X							
Data Collection—including:	X	X	X	X	X	X	X	X	X	X	X	
Order/act creating district												
Changes in boundaries												
Current directors												
Audit report												
Continuing right of supervision	X	X	X	X	X	X	X	X	X	X	X	
Investigate internal affairs												
Issue rules to supervise districts												
General State Regulation	X	X	X	X	X	X	X	X	X	X	X	X
Water rights permits												
Dam & levee approval												
Wastewater discharge permits												
Disposal of solid wastes												
Enforcement of laws & rules												
<b>Attorney General</b>	1	2	3	4	5	6	7	8	9	10	11	12
Approves bonds	X	X	X	X	X	X	X	X	X	X	X	X
Enforcement of laws & rules	X	X	X	X	X	X	X	X	X	X	X	X
<b>County Commissioners</b>	1	2	3	4	5	6	7	8	9	10	11	12
Creation—approval	X	X		X	X	X	X			X		
Financial—approves bonds				X	X							
<b>City Councils</b>	1	2	3	4	5	6	7	8	9	10	11	12
Creation—approval required if district encroaches on city or ETJ			X									
Financial & Projects Approval of plans for facilities within city or ETJ								X				

Regulation also occurs at the local level. One of the primary areas of local regulation that affects the management of water resources is the regulation of groundwater by underground water conservation districts. Although groundwater is not regulated at all in most parts of the state, groundwater regulation, when it occurs, is not regulated in a consistent fashion. In general, the regulation may range from an information and education activity to a comprehensive regulatory program that controls planning, spacing and production of water wells in the district. Because groundwater production in the state constitutes over 60% of the water used in Texas, the management of groundwater resources is a significant part of an overall state water management system.

The management of groundwater as a general rule should continue to be conducted at the local level. However, the local system must ensure that critical groundwater problems around the state are being effectively managed through this system. A map of critical groundwater areas in Texas is included as Appendix E. Currently the systems developed at the local level do not adequately address the state's groundwater problems. In some areas, regulation provides a sound management system to protect and enhance the groundwater resource, while in others, nothing is being done. To ensure that locally implemented groundwater programs

## Committee Findings

appropriately manage the state's groundwater resource, minimum standards of regulation should exist and all underground water conservation districts should meet those minimum standards of regulation.



## COMMITTEE RECOMMENDATIONS

**GENERAL RECOMMENDATION NUMBER 1**

Recognizing that water conservation programs are a critical part of a water resource management program, the Committee recommends that appropriate regulation be developed to provide for improved water use, re-use, and reduced consumption of water as an objective of water resource management throughout the State.

In addition to this general recommendation recognizing the need for regulation to promote water conservation, the Committee identified several specific areas where improvements could be made to encourage conservation. The following specific recommendations address these areas.

1.1 The Texas Water Commission and the Texas Water Development Board should adopt uniform regulations requiring applicants for water rights permits from the Commission and applicants for financial assistance from the Board to formulate and submit to the respective agencies conservation plans and to adopt and implement reasonable conservation measures.

The 69th Legislature, in legislation adopted to implement the constitutional amendments approved by the voters in November 1985, authorized the Texas Water Commission and the Texas Water Development Board to require water conservation plans. This Legislation requires that applicants for water rights permits provide the Commission with evidence that diligence would be used to avoid waste and to achieve conservation. In addition applicants for financial assistance are required to adopt, or to have already implemented a program of water conservation, before the Water Development Board may grant applications for financial assistance or provide any funds under the application. These new requirements are generally prospective in nature, applying only to new applications for water use and financial assistance, and they allow the Commission and the Board to look at new projects that are linked to these approval processes. Even though existing projects and operations are not covered by these requirements, the Commission and the Board can ensure that future projects are designed to promote water conservation.

Both the Commission and the Board have adopted regulations to implement these requirements. In the

application of these regulations to specific projects, both agencies should require actions that are consistent and that recognize regional differences. Consistency is necessary to prevent the Commission and the Board from requiring conflicting conservation measures of an applicant seeking approval from both agencies.

To recognize regional differences, conservation measures for a particular project should to be tailored to suit local conditions and needs. Conservation regulation should be accomplished through the use of conservation plans and conservation measures imposed on a applicant for a permit, for a permit amendment, or for financial assistance. While the Commission and the Board may wish to set minimum standards for conservation which would apply in all parts of the state, conservation plans which meet those minimum requirements should also recognize regional differences.

**1.2 The Texas Water Commission should require all non-exempt surface water diversions to be metered.**

Currently, metering of surface water diversions is required and occurs in only one state river basin, the Rio Grande River Basin. Under this recommendation, all

water rights holders in the State who are permitted by the Texas Water Commission would be required to meter water taken at the diversion point. Certain diversions of state water, such as domestic and livestock uses, are exempt from Commission approval and metering would not be required. A state-wide metering program would not only improve the accuracy of the water use data reported to the Texas Water Commission but would also underscore the awareness that water is becoming a scarce and valuable resource.

This program would encourage conservation in at least two ways. First, metering would allow the Texas Water Commission to have information useful in enforcing water use violations. The ability to enforce the State's primary water resource allocation system is essential if conservation in Texas is going to be meaningful. Second, the ability of a diverter to know exactly how much water the diversion system is using can be useful information when conservation efforts to reduce system losses are being planned and implemented.

**1.3 The Texas Water Commission and the Texas Water Development Board should encourage conservation-oriented water rate**

**structures, as part of the conservation plans they are authorized by law to require.**

Surface water in Texas is essentially free. As a result, water rates for the delivery of raw or treated water have generally been based upon the cost of delivery or treating the water. Water rates have not been based on the actual value of the water itself. This pricing structure has not provided a financial incentive for water to be used as efficiently as it could have been. While the true value of water as a commodity may never be subject to exact determination, rate structures which encourage efficient use of water will help to preserve the supply of this valuable resource.

**1.4 The Texas Water Commission, the Texas Water Development Board, and all districts, authorities, and local water suppliers should promote educational programs to promote water conservation.**

In the course of one generation, Texas has grown from a sparsely populated rural state to the third most populous state in the nation. Except in the most arid parts of the state, the supply of water was once thought to be more than adequate. To some extent, this

perception of bountiful supply may persist. Clearly, no amount of conservation regulation can be successful unless the public is aware of the need for the regulation.

Local entities understand local needs and problems best. The State water agencies have the expertise and the state-wide perspective needed to demonstrate to the citizens of Texas the need for conservation in every corner of the state. Together, State and local governmental bodies can effectively heighten public awareness.

1.5 The Texas Water Commission, the Texas Water Development Board, and local entities should work closely together to develop a policy which encourages conservation of water in agricultural uses including the use of an acceptable measuring device at the point water is diverted from its source. This policy should recognize the different characteristics of various water delivery systems.

Over 70% percent of the water in the state is used for agricultural purposes. Because this is such a high percentage of the state's total water consumption, conservation in the agricultural area is essential to

the state's overall conservation effort. State and local authorities can aid in the conservation of water applied to agricultural use in various ways. The Committee has seen examples of educational and assistance programs implemented by underground water conservation districts which have promoted conservation. These programs make the public aware of the problems resulting from overdrafting of an underground aquifer. Such programs also act as a conduit for State financial assistance to purchase new, more efficient irrigation equipment and to increase the efficiency of older equipment. Testimony presented to the Committee indicated that improvements on irrigation canals and the metering of water taken for irrigation improve the efficiency of surface water use.

Policy decisions regarding the use of agricultural water in the state are made at many different levels by many different governmental bodies. The production and use of groundwater for agricultural purposes is regulated on the local level to the extent that is regulated at all. The allocation and use of surface waters for agricultural purposes are regulated on a State level. The allocation of State funds for agricultural projects is also made primarily on a State



level. In addition, certain districts and authorities assist in the financing of projects in various regions of the state.

The Committee has seen evidence that conservation cannot be achieved by education alone, by regulation alone, or by financial incentives alone. A combination of these three is required. In order to maximize efficiency and conservation in the use of water for agricultural purposes, the combined and cooperative efforts of all entities involved in making water policy decisions is imperative. The Committee recommends that the Texas Water Commission and the Texas Water Development Board begin a dialogue with each other, and with any agencies and districts involved in regulating or financing agricultural water projects, to develop a policy for increasing the efficiency of water used in agriculture.

**GENERAL RECOMMENDATION NUMBER 2**

Recognizing that the current method of implementing water resource projects at the lowest practicable level of government is desirable in Texas and is recognized in the Constitution and laws of the State, the Committee recommends that local entities should continue to be responsible for planning, implementing and operating water resource projects.

Although the current system of implementing water related projects at the local level works very well and should be continued, certain concerns relating to the operation of these local entities surfaced during the Committee's hearings. The following specific recommendations address these identified concerns.

**2.1 The methods for selecting directors for the boards of districts and authorities are appropriate.**

When the Committee began their work, they resolved to examine the methods by which directors were selected to see if all directors should be elected, locally appointed, or appointed at the State level. Testimony in all parts of the state regarding districts and authorities of various types indicated that the citizens

served by each of the respective districts and authorities were generally satisfied with the methods by which directors were chosen. The variety of methods for selecting directors also appears to be well-suited to the variety of needs to be addressed in different parts of the state. No significant benefit would be derived from a change in the methods of selection now employed.

2.2 The laws regarding self-insurance by political sub-divisions should be expanded to allow water districts and river authorities to self-insure for the coverage of business judgement related liability on the part of their directors and officers.

Directors and officers of water districts and river authorities do have a limited amount of immunity from liability for actions connected with their service to their respective districts and authorities. However, directors and officers can be personally liable to the district and to bond holders for their business decisions and are often named in lawsuits. Even if these lawsuits do not result in personal liability to the directors and officers, the cost of defending the lawsuits is great. The Committee has heard testimony in all parts of the state, that the cost of insurance

for directors and officers is prohibitive, that the exposure to liability is great, and that the exposure to lawsuits is even greater.

While directors and officers should remain accountable for their business decisions, the Committee has seen a need across the state to provide some relief in the area of insurance costs. One possible solution would be to allow a minimum set number of districts and authorities to join together and self-insure for errors and omissions insurance coverage, much in the same way that counties may self-insure for different forms of liability. While the witnesses who testified to the Committee regarding the liability issue said they felt privileged to serve on their various boards, they noted that the prohibitive costs of insurance and the increasing exposure to liability and suits could prevent them from continuing to serve in the future. In order to insure that qualified and dedicated individuals continue to serve on the boards of water districts and river authorities across the state, the Committee recommends that the Legislature examine the self-insurance alternative and any other possible alternative closely.

2.3 The owners of all dams not meeting the minimum standards required by the Corps of Engineers Phase I testing program should:

- (a) Review the reports on those dams and determine what changes need to be made;
- (b) Report to the Texas Water Commission; and,
- (c) Take any necessary remedial measures as may be directed by the Texas Water Commission.

The predecessor agencies to the Texas Water Commission participated in the Army Corps of Engineers' program to test dams across the country by testing certain high hazard dams in Texas. High hazard dams are those which, if they failed, would cause loss of life or significant property loss. The purpose of the test was to determine whether the dams met certain minimum criteria for withstanding certain flood events. Reports were published on each dam. Those which met the standards received a "green cover" (safe) report. Those that did not received a "red cover" (unsafe) report.

Many of the dams that did not meet the minimum requirements of the Corps test have been found upon examination and inspection to be structurally sound. Further, remedial action has been taken or has been initiated on

several of the dams. It should be noted that the Corps' test subjected the dams tested in Texas to much more rigorous standards than those used at the time the dams were constructed.

Nevertheless, development patterns around some dams may have changed and engineering techniques have improved over the years. Where improvements are needed to increase the safety factor, they should be made. If necessary, the Commission should compel remedial action by rule or by order.

**2.4 Within a reasonable period of time, the Commission should notify the public concerned of dams not meeting the minimum standards required of the Corps Phase I testing program.**

The members of the public who are affected by the fact that a dam did not meet the Corps' Phase I testing criteria should be notified. The Texas Water Commission has the ability to disseminate this information. While the Committee has seen no evidence that life or property are in peril because of the dams in question, the Commission should begin notifying affected parties within a reasonable time.

**GENERAL RECOMMENDATION NUMBER 3**

Recognizing the need to assure that the state's water resources are appropriately utilized in the future, the Committee recommends that all districts and authorities be subject to uniform rules and regulations by the State which take into consideration regional resources and uses, and that appropriate legislation be defined to clarify State authority for this purpose.

For State agencies to clearly be authorized to adopt uniform regulations that would apply to all entities that implement local water projects and programs, existing statutory language in the Texas Water Code should be changed. The following specific recommendations identify two necessary revisions.

3.1 The Texas Water Code should be amended to allow the Texas Water Commission to adopt uniform regulations regarding the use of state resources which apply to all water rights permits and all water quality discharge permits. The Commission should be authorized to promulgate these regulations for the purposes of promoting water conservation, encouraging the development of regional systems, and protecting the environment.

Water legislation which has been enacted in Texas over the past few years has focused on the need to conserve water resources, the need to encourage regional distribution and treatment facilities, and the need to protect the environment. Although the Texas Water Commission has broad authority to protect and conserve the water of the state, testimony before the Committee indicated that some disagreement exists regarding the application of that authority to existing permittees. To successfully implement the State's water policy, uniform regulations to promote conservation, regionalization, and environmental protection should be adopted by the Commission and should apply to all permittees.

**3.2 The continuing right of supervision over districts and authorities delegated to the Texas Water Commission should be made to apply to all districts and authorities in the state.**

Section 12.081 of the Texas Water Code provides that the powers and duties of all districts and authorities are subject to the continuing right of supervision of the State of Texas by and through the Texas Water Commission. This statute speaks in general terms of "districts and authorities." However, in enumerating



some of the supervisory measures which the Commission may take, the statute speaks only in terms of "districts." Furthermore, subsection (b) specifically excludes some river authorities and districts from the supervisory control delegated in this statute. In order to insure that all districts and authorities are subject to uniform regulation and equal treatment, this statute should be amended to clearly delegate to the Texas Water Commission the continuing right of supervision over all districts and authorities.

**GENERAL RECOMMENDATION NUMBER 4**

Recognizing that there are gaps and overlaps within the existing institutional framework of water entities which inhibit effective water resource management in certain areas, and recognizing that these problems may increase in number in the future, the Committee recommends that regional coordinating mechanisms be established under the appropriate State agency to facilitate water resource planning and coordination of programs and projects by local entities in regions of the state where water resource needs are not being addressed.

To implement this general recommendation, the committee makes the following specific recommendations.

4.1 The Texas Water Commission and the Texas Water Development Board should jointly appoint regional advisory committees to examine the problems in those regions of the state where appropriate. The membership of these committees should include public officials and representatives from industry, water entities, conservation groups, and agricultural interests from within a particular region.

The very broad charge given to the Water District and River Authority Study Committee would not permit an in-depth study of each of the areas of the state where gaps in the management framework occur. However, the Committee acknowledges that there are management gaps in some regions. In those regions, the distribution of water rights, financial resources, enforcement powers, and expertise tend to be fragmented and regional coordination to address State water policy goals does not occur. As a result, problems which are acknowledged by all persons in the region are not being addressed. Since the issues involved in each of these regions are varied and complex, an in-depth study of the problems on a regional basis is warranted. Once created, these Regional Advisory Committees can use local expertise and information to solve problems in a manner that is consistent with state-wide objectives.

The Texas Water Commission and the Texas Water Development Board already have statutory authority to establish these advisory committees. No additional statutory authority is necessary.

**GENERAL RECOMMENDATION NUMBER 5**

Recognizing that groundwater is an essential component in any comprehensive water resource management plan, the Committee recommends that the State seek authority to impose minimum criteria for regulation of groundwater production on local groundwater management entities and to create management entities where necessary.

During the Committee's hearings, testimony was presented that pointed out various areas of concern with regard to groundwater. These concerns range from very general comments about groundwater regulation in Texas to some specific changes that should be made to existing procedures. The following specific recommendations address some of the problems identified.

5.1 The Texas Water Code should be amended to authorize the Texas Water Commission to promulgate minimum criteria and enforcement standards for water conservation, production, and water quality and to make all underground water conservation districts subject to these minimum criteria.

Many districts which regulate groundwater pumping, for a variety of reasons, are performing their functions

very well. Those regions of the state served by active districts are characterized by a heightened public awareness of groundwater problems, a general acknowledgement of the need to conserve and protect groundwater supplies, and evidence that subsidence is being prevented, water quality is being protected, and water depletion is being decreased. However, in some regions of the state, inactive districts fail to guard the aquifers they were created to protect. Furthermore, nearby districts which are more active are precluded from regulating those areas covered by inactive districts. In addition, some underground water conservation districts do not have the authority to regulate production. Minimum standards affecting all underground water conservation districts would require existing districts to achieve a level of regulation that would adequately protect groundwater resources.

**5.2 The Texas Water Code should be amended to change the process of adding new territory to an existing district.**

The Texas Water Code requires that the addition of an area to an existing district be approved both by the voters of the area itself and by the voters of the

existing district. This process should be changed to provide that an area may be added to an existing district if the measure receives approval from the voters of the area and from the board of directors of the existing district.

The holding of an election on the addition of an area to a district constitutes an added expense to the taxpayers of the district. Since it will not affect the amount of regulation which would occur in the existing district, it would appear that the board of directors elected by the people of the existing district could fairly represent the interests of the people in the district.

**5.3 The Texas Water Code should be amended to authorize underground water conservation districts to charge fees in addition to ad valorem taxes.**

Currently underground water conservation districts are financed exclusively by ad valorem taxes approved by the voters. Although this system of generating revenue to operate a district works very well, in some cases it may not provide a sufficient or appropriate funding

source. In some situations, a fee system for the district may better fit that district's local situation. To provide the districts with a more flexible funding system, underground water conservation districts should be authorized to charge fees.

5.4 Instead of the current limitation on financial assistance, the Texas Water Code should be amended to authorize the State to assume regulation of a critical area where the election for the creation of an underground water conservation district does not pass.

The Texas Water Code provides that a city, county, or district which is located in an area delineated as a critical area, and in which the qualified voters do not approve the creation of a district, is not eligible to receive financial assistance from certain State programs. This section is intended as an incentive to approve the creation of an underground water conservation district. However, the provision may be counterproductive. In areas where the election fails, not only will there be no district to regulate groundwater, but State funds for many other water projects will not be available.

A more effective approach to encouraging the creation of districts in critical areas is to provide interim regulation. If an election to create a district failed in a designated critical area, the Commission would assume regulation in that area. Commission regulation would continue until such time as local residents hold another election and vote to assume regulatory duties themselves.



**GENERAL RECOMMENDATION NUMBER 6**

Recognizing that the issue of water resource management in the state is in transition and that the institutional relationships among water entities in the state need to be re-directed at this time to insure appropriate management of these resources, the Committee sees the need for continuing oversight of the water resource management, development and regulation process in the state, and recommends that an appropriate oversight body be created by the Legislature for this purpose.

6.1 The legislature should create a special oversight committee to provide oversight of all public interests and entities involved in water resources planning, development, management, utilization and regulation at the local, regional, and state levels.

Changing conditions in the state require that approaches to water resource management adapt accordingly. Continuous oversight of the management performance of all entities involved would encourage adaptation to those changing needs. The Committee recommends that an appropriate oversight body be created by the legislature for this purpose.

**6.2 This Oversight Committee should be called the "Texas Water Resources Management Oversight Committee."**

The suggested name reflects the purpose and function of the Committee.

**6.3 The Legislature should set a reasonable fee to be assessed each district, authority, and entity subject to the oversight by the Texas Water Resource Management Oversight Committee. Such assessment shall be adequate to pay the operating and administrative costs required by the Texas Water Resources Management Oversight Committee.**

A Water Resource Management Oversight Committee will benefit all who are involved in water resource policy-making in Texas. A reasonable annual assessment to be paid by the parties benefitted is a fair way to support the review process. There are well over 1,000 active districts and authorities in the state at present, and so the financial burden on the individual district should not be great.

**6.4 In conducting its review, the Oversight Committee should streamline the process as much as possible and keep reporting requirements to a minimum.**

The purpose of the Oversight Committee will be to increase coordination and efficiency in water resource management. It follows that the oversight process itself should be an efficient process. A certain amount of documentation, written reports, and other paperwork will be unavoidable in the review process. However, to the extent that the accuracy, thoroughness, and fairness of the review process are not sacrificed, excess paperwork should be avoided.

6.5 Because the Oversight Committee proposed in 6.1 above would provide more effective and continuous review of districts and authorities, the current laws requiring sunset review of certain districts and authorities should be repealed.

House Bill No. 1583, enacted by the 69th Legislature, amended the Texas Sunset Act to provide that 19 river authorities and their boards of directors would come under review by the Sunset Commission. The Committee has recommended in 6.1 above that all water agencies be placed under an oversight body which would review their activities on a continuous basis. In light of the Committee's Recommendation No. 6.1, sunset review would be a duplication of effort.

**GENERAL RECOMMENDATION NUMBER 7**

Recognizing that all public agencies must be accountable to the people of Texas, the Committee recommends that the legislature require all districts and authorities to adopt policies which would set standards of conduct for their employees, officials, and directors, and which would require clearer and more thorough financial reporting.

All who are charged with the public trust must be held to high standards of conduct in the performance of their duties. The Committee makes the following specific recommendations in regard to business conduct and financial reporting:

7.1 In lieu of the current requirement that the State Auditor conduct an audit each year on 23 specifically named districts and authorities, the Water Code should be amended to require that all water districts and river authorities, consistent with their enabling legislation, adopt the following:

- (a) A written code of ethics for all employees, officials and directors (including investment personnel).
- (b) A written policy on travel expenditures.

- (c) A written policy on investments which would ensure:
  - (1) that all purchases and sales are initiated by authorized individuals and conform to investment objectives and regulations and are properly documented and approved; and
  - (2) that periodic review be made to evaluate investment performances and security of investments.
- (d) Written policies and procedures for selection, monitoring or review and evaluation of professional services.
- (e) A uniform method of accounting and reporting on Industrial Development Bonds and Pollution Control Bonds prescribed by the State Auditor.
- (f) Policies which ensure a better utilization of management information:
  - (1) Budgets for use in planning and controlling costs;
  - (2) A functioning audit committee of the governing board; and
  - (3) Achieve greater uniformity in reporting:
    - \* using Audits of State and Local Governmental Units as a guide on audit working papers; and

- \* using Governmental Accounting and Financial Reporting Standards.

Section 50.381 of the Texas Water Code provides that 23 of the state's river authorities and major water districts must submit to an audit by the State Auditor each year. The State may require each district or authority to pay for the actual cost of their audit. In addition to this audit requirement, § 50.371 of the Texas Water Code requires all districts and authorities to have an independent audit of the fiscal accounts and records conducted each year at their own expense. The Committee heard testimony which indicated that these dual audit requirements were a great financial burden, and that the public interest was not served by the added expense and effort.

The public interest is well served by the requirement that all districts and authorities have independent audits performed each year and that these audits be made available for inspection. However, a second audit would not be necessary if all districts and authorities were required to adopt definite policies governing all activities which affect the management of public funds entrusted to them. Clear policies will insure that

sound, ethical business decisions are made and that all transactions are accounted for. The Texas Water Commission, its predecessor agencies, and the State Auditor have been working to require greater uniformity in accounting methods used for reports. Still, there is a need for greater uniformity in reporting. Uniformity will allow the public to get a clearer picture of the financial activities of districts and authorities.

7.2 In addition to the requirements in 7.1 above, the Water Code should provide that:

- (a) All districts and authorities file annual audits with the State Auditor for review and comment, and that the State Auditor's comments be filed with the Legislative Audit Committee and the governing board of the district or authority; and
- (b) The State Auditor may audit the financial transactions of any district or authority if the State Auditor determines that such an audit is necessary.

The public is entitled to expect a higher-than-average level of accountability from all entities managing public monies. While the mandatory dual audit procedures mentioned in 7.1 above should be repealed, the

State Auditor should be authorized to review and comment on the annual audits of districts and authorities, and the State Auditor should be authorized to inquire into their financial affairs if he determines that it is necessary. This procedure will insure a high level of accountability, but will eliminate costly duplication of effort.



## **SUGGESTED LEGISLATION**

RECOMMENDATION 3.1

3.1 The Texas Water Code should be amended to allow the Texas Water Commission to adopt uniform regulations regarding the use of state resources which apply to all water rights permits and all water quality discharge permits. The Commission should be authorized to promulgate these regulations for the purposes of promoting water conservation, encouraging the development of regional systems, and protecting the environment.

Suggested legislation to implement this recommendation:

Chapter 11 of the Texas Water Code should be amended to add a new section which reads as follows:

§11.006 Authority to Promulgate Certain Rules

(a) The commission in meeting the water requirements of the citizens of Texas may promulgate rules under this chapter for the following purposes:

- (1) to promote the conservation of water;
- (2) to promote regionalization; and,
- (3) to promote the protection of the environment.

(b) The regulations promulgated under this section may govern the issuance of permits under this chapter, the use of water held under existing water rights, and any other activity which may be regulated pursuant to this chapter.

(c) The authority granted to the commission in this section is cumulative of any other authority granted to the commission by law.

Chapter 26 of the Texas Water Code should be amended by adding a new section which reads as follows:

§26.0111 Authority to Promulgate Certain Rules

(a) The commission in meeting the water requirements of the citizens of Texas may promulgate rules under this chapter for the following purposes:

- (1) to promote the conservation of water;
- (2) to promote regionalization; and,
- (3) to promote the protection of the environment.

(b) The regulations promulgated under this section may govern the issuance of permits under this chapter, activities conducted under existing permits issued pursuant to

this chapter, and any other activities which may be regulated under this chapter.

(c) The authority granted to the commission in this section is cumulative of any other authority granted to the commission by law.

RECOMMENDATION 3.2

3.2 The continuing right of supervision over districts and authorities delegated to the Texas Water Commission should be made to apply to all districts and authorities in the state.

Suggested legislation to implement this recommendation:

Water Code § 12.081 should be amended as follows:

§ 12.081. Continuing Right of Supervision of Districts and Authorities Created Under Article III, Section 52 and Article XVI, Section 59 of the Texas Constitution

(a) The powers and duties of all districts and authorities created under Article III, Section 52 and Article XVI, Section 59 of the Texas Constitution are subject to the continuing right of supervision of the State of Texas by and through the commission or its successor, and such powers and duties are as follows [~~this-supervision-may-include-but-is not-limited-to-the-authority-to~~]:

(1) inquire into the competence, fitness, and reputation of the officers and directors of any district or authority;

## Suggested Legislation

(2) require, on its own motion or on complaint by any person, audits or other financial information, inspections, evaluations, and engineering reports;

(3) issue subpoenas for witnesses to carry out its authority under this subsection;

(4) institute investigations and hearings using examiners appointed by the commission; and

(5) issue rules necessary to implement the above numbered paragraphs [~~issue - rules - necessary - to - supervise - the districts - and - authorities~~].

(b) The Commission shall prepare and submit its findings to the Governor of Texas and shall cause a copy of same to be sent to the Lieutenant Governor of Texas and to the Speaker of the House of Representatives. [~~The - provisions - of - this - section - shall - not - apply - to - any - river - authority encompassing - 10 - or - more - counties - which - was - not - subject - to the - continuing - right - of - supervision - of - the - State - of - Texas - by and - through - the - commission - or - its - predecessors - on - June - 10, 1969 -~~]

RECOMMENDATION 5.1

5.1 The Texas Water Code should be amended to authorize the Texas Water Commission to promulgate minimum criteria and enforcement standards for water conservation, production, and water quality and to make all underground water conservation districts subject to these minimum criteria.

Suggested legislation to implement this recommendation:

Chapter 50 of the Water Code should be amended by adding a new section 50.501 which reads substantially as follows:

§ 50.501. Minimum Standards Concerning Underground Water Regulation.

(a) Definitions: as used in this section:

(1) "District" means any district or authority created under Article III, Section 52 or Article XVI, Section 59 of the Constitution which has the authority to regulate the spacing of or production from water wells, or the conservation or prevention of waste of underground water, including but not limited to all districts created under Chapter

52 of this Code and all districts created under V.A.T.S. art. 7880-3C [repealed].

(2) "Waste" shall have the same meaning defined in § 52.001(7) of this Code.

(b) The commission may develop and adopt minimum standards for district regulation of spacing of or production from water wells, conservation of underground water or prevention of waste of underground water, through the rulemaking provisions contained in Article 6252-13a, Administrative Procedure and Texas Register Act.

(c) Within 120 days of the effective date of any commission standards or amendments thereto adopted pursuant to subsection (b) hereof, districts affected by the standards shall promulgate or amend their regulations so that they meet or exceed the minimum standards of the commission.

(d) Districts shall enforce compliance with their regulations.

(e) If a district fails to comply with subsection (c) hereof the commission may:

(1) hold a hearing and order the district to adopt regulations which meet or exceed commission standards.

(2) hold a hearing and issue an order as provided in subsection (g) hereof; or,

(3) issue any other orders authorized by law.



(f) If a district fails to enforce its regulations or if any district does not enforce substantial compliance with its rules, the commission may:

(1) hold a hearing and order the district to enforce its regulations;

(2) hold a hearing and issue an order as provided in subsection (g) hereof; or,

(3) issue any other orders authorized by law.

(g) After a hearing and in accordance with the provisions of subsection (e) or subsection (f) hereof, the Commission may, by order, assume jurisdiction over the regulation of underground water within the non-compliant district for such time as the commission deems necessary. The commission may also adopt any new rules which the district would be authorized by law to adopt. Any rulemaking or enforcement of rules by the commission shall be in accordance with the Administrative Procedure and Texas Register Act.

RECOMMENDATION 5.2

5.2 The Texas Water Code should be amended to change the process of adding new territory to an existing district.

Suggested legislation to implement this recommendation:

The Texas Water Code should be amended to add a new section which reads as follows:

§52.104. Adding Land in Existing District.

(a) If land in a management area is located outside of and adjacent to an existing district, the Executive Director or any interested party may petition the commission to order an election to determine whether the land should be added to an existing district designated by the commission, or the commission may issue such an order on its own motion.

(b) The petition shall contain a description of the boundaries of the land to be added to the existing district and any other information the commission requires. The petition shall also be accompanied by a bond or deposit in an amount sufficient to pay the costs of any election held

pursuant to this section. The commission may require additional bond or deposit.

(c) Before the commission orders that an election be held, the commission must submit a copy of the petition to the board of the district to which the land will be added. Within sixty (60) days after receiving the petition, the board shall vote to accept or not to accept the additional area as part of the district. The board shall notify the commission of their decision within ten (10) days of board action.

(d) If the board of the district votes to accept the additional land, the commission may order an election in the area to be added to determine if the land should be added to the existing district and a proportionate share of the outstanding indebtedness of the district should be assumed. If the board of the district votes not to accept the additional land, the commission shall not order an election to determine if the land should be added to that district.

(e) In its order to hold an election, the commission shall delineate the boundaries of the land proposed to be added to the district, and designate the district to which the land will be added. In its order the commission must

also find that the land and other property in the proposed additional area and the land in the existing district will benefit from the addition of the area, that there is a public need to add the additional area to the existing district, and that addition of the land to the existing district would further the public welfare.

(f) The commission shall submit a copy of the election order to the board of the district to which it is recommended that the additional area be added.

(g) Within ten (10) days after receiving a copy of the commission's order, the board shall call an election within the area to be added which is delineated in the commission's order. In its order calling the election the board shall designate election precincts and polling places for the election.

(h) The board shall give notice of the election and the proposition to be voted on. The board shall publish notice of the election at least one time in one or more newspapers with general circulation within the boundary of the proposed additional area. The notice must be published before the 30th day preceding the date set for the election.

(i) The ballots for the elections shall be printed to provide for voting for or against the proposition: "the inclusion of ----- (briefly describe additional area) in the ----- District and assumption by the described area of a proportional share of the outstanding indebtedness of the district."

(j) Immediately after the elections, the presiding judge of each polling place shall deliver the returns of the election to the board, and the board shall canvass the returns for the election and declare the results. If a majority of the voters in the proposed additional area voting on the proposition vote in favor of the proposition, the board shall declare that the area is added to the district. If a majority of the voters in the proposed additional area voting on the proposition vote against the proposition, the board shall declare that the area is not added to the district. The board shall file a copy of the election results and board action with the commission.

(k) If the voters approve the proposition to add land to the existing district, the costs of the election shall be paid by the existing district as expanded by the election. On the motion of the petitioner, the commission shall order

that the bond be released or the deposit returned to the petitioner.

(l) If the voters do not approve the proposition to add land to the existing district, the board may petition the commission to apply the proceeds of the bond or the deposit submitted with the election petition to the cost of the election. The petition for payment shall be accompanied by a sworn account of the costs of the election. The commission shall order that the costs of the election be paid with the proceeds of the bond or the deposit. The commission may order that the expenses be paid to the persons owed or that the district be reimbursed. Any election costs above the amount of the bond or deposit shall be paid by the commission. On the motion of the petitioner, the commission shall order that any deposit funds in excess of the election costs be returned to the petitioner.

(m) If the voters do not approve the proposition to add land to the existing district where the Executive Director or the commission initiated the proceedings, the commission shall pay the costs of the election.

(n) If the area is added to the existing district, the board of the district shall provide for the reasonable

representation of the area on the board that is compatible with the district's existing scheme of representation.

(o) If the vote on the proposition to add the area to the existing district fails, an election to add the area to the same district or another district may not be called during the 12-month period immediately following the date on which the election on the proposition was held.

RECOMMENDATION 5.3

5.3 The Texas Water Code should be amended to authorize underground water conservation districts to charge fees in addition to ad valorem taxes.

Suggested legislation to implement this recommendation:

The Water Code should be amended by adding the following section:

§ 52.262. Fees.

(a) The district may establish and collect fees necessary for the administration and operation of the district.

(b) The funds obtained from fees collected under this section may be used to cover the cost of the district in issuing permits and performing other regulatory functions authorized by this subchapter. The funds may also be used to pay the operating and maintenance expenses of the district, and to pay the principal and interest on its bonds and notes.



## Suggested Legislation

Section 52.292 of the Water Code should be amended as follows to allow revenue from fees to be applied to repayment of bonds and notes:

### § 52.292. Manner of Repayment of Bonds and Notes

(4) from fees imposed under Sections 52.262 of this Code.

(5) [~~4~~] from a combination of the sources listed in Subdivisions (1)-(4) [3] of this section.

## RECOMMENDATION 5.4

5.4 Instead of the current limitation on financial assistance, the Texas Water Code should be amended to authorize the State to assume regulation of a critical area where the election for the creation of an underground water conservation district does not pass.

Suggested legislation to implement this recommendation:

Section 52.0611 of the Texas Water Code should be amended as follows:

§52.0611 (State--Assistance) Defeat of Election to Create a District within a Critical Area

~~A-city,-county,-or-district-created-under-Article-III, Section-52(b)(1)-and-(2),-or-Article-XVI,-Section-59,-of-the Texas-Constitution-that-is-located-in-an-area-delineated-as a-critical-area-under-this-chapter-and-in-which-the-qualified-voters-fail-to-approve-the-creation-of-a-district-is not-eligible-to-receive-any-financial-assistance-from-the State-under-Chapter-15,-16-or-17-of-this-code.~~

(a) If the qualified voters within an area delineated as a critical area under this chapter fail to approve the creation of a district, the commission may, by order, assume

jurisdiction over the regulation of groundwater within the boundaries of the critical area.

(b) In addition to any other authority it may have, the commission will have all the powers granted to a district created under this chapter for the purpose of administering the critical area described in subsection (a) above. The commission may issue permits for water wells within the critical area and charge fees. The revenues from these fees will be applied to the cost of administering the regulatory program in the critical area.

(c) Any regulations which the commission promulgates pursuant to this section shall be promulgated in accordance with V.A.T.S. art. 6252-13a, the Administrative Procedure and Texas Register Act. The regulations may, without limitation, be made to apply within any part of the territory of any district, authority, county or home rule or general law city which lies within the critical area.

(d) The commission may relinquish jurisdiction over the regulation of groundwater within the critical area at any time. After the expiration of one (1) year from the date on which the commission assumes jurisdiction, fifty (50) or a major of the qualified voters in the critical area, whichever is less, may petition the commission to appoint temporary directors and call another election to confirm the creation of a district in the critical area. If

the commission determines that the creation of the district will benefit the critical area, the commission shall order the election to be held as provided in this subchapter. Until the creation of the district has been confirmed and the directors have been elected and have qualified, the commission shall retain jurisdiction over the regulation of groundwater in the critical area.

RECOMMENDATION 6.0

6.0 The committee sees the need for continuing oversight of the water resource management, development and regulation process in the state, and recommends that an appropriate oversight body be created by the Legislature for this purpose.

Suggested legislation to implement this recommendation:

SUBCHAPTER \_\_\_\_ TEXAS WATER RESOURCES  
MANAGEMENT OVERSIGHT COMMITTEE

§1.021. Committee

The Texas Water Resources Management Oversight Committee is created.

§1.022. Members.

(a) The committee shall consist of nine members who are knowledgeable in water resource management and policy matters.

(b) The committee is composed of:

(1) Three members appointed by the Governor;

(2) Three members appointed by the Lieutenant Governor, one shall be a member of the Texas

Senate and two shall be members of the general public; and

(3) Three members appointed by the Speaker of the Texas House of Representatives, one shall be a member of the House and two shall be members of the general public.

(c) A committee member who is a Senator or a member of the House of Representatives becomes ineligible to serve as an elected representative when that person leaves office.

(d) The committee shall elect a Chair and Vice Chair from the membership at the first meeting of the Committee after September 1 of odd numbered years. Each officer shall serve a term of two years.

(e) The members of the committee shall hold office for staggered terms of six years, with the term of three members expiring every two years. In order to accomplish the staggered terms, the Governor, the Lieutenant Governor, and the Speaker shall each appoint one initial member to serve for a period of two years, one initial member to serve for a period of four years, and one to serve for six years.

(f) A person appointed to the committee may not serve for more than two six-year terms.

§1.025. Meetings.

The committee shall meet every two months or at the call of the chair.

§1.026. Purpose and Duties.

(a) The purpose of the committee shall be, on a continuing basis, to examine the water resource management operations of all entities managing water resources in the State, to examine the relationships these entities to have to one another and to the State, and to report its findings to the Legislature along with any recommendations for the improvement of water resource management in the State.

(b) The committee shall have the authority to:

- (1) conduct investigations of all the water resource management operations of all entities subject to the jurisdiction of the committee;
- (2) require audits or other financial information, inspections, evaluations, and engineering reports relating to water resource management;
- (3) issue subpoenas for witnesses to carry out its authority under this subchapter; and
- (4) enter into contracts with federal, state, or local government agencies, or private persons or

entities, for the purpose of fulfilling its duties or exercising its authority under this subchapter.

(c) On or before December 1 of every even-numbered year, the committee shall complete and submit a report to the standing committees in each house of the Legislature which have primary responsibility over matters related to water resources. The report shall contain the findings of the committee made in the course of its investigations over the previous two years and any recommendations which the committee may have.

(d) The committee shall only have the duties, responsibilities and authorities provided in this subchapter.

The committee shall not:

- (1) regulate water use, water quality or any other aspect of water resource management;
- (2) plan water resource projects or cause such projects to be planned; or
- (3) construct water resource projects, cause such projects to be constructed, or grant or loan any funds for such purposes.

(e) In conducting its review, the committee shall keep reporting requirements to a minimum and avoid duplication of effort where possible.

#### §1.027. Jurisdiction



The committee shall have the authority to investigate all entities which have a role in the management, development and regulation of water resources in the state.

§1.028. Staff

(a) The Legislative Council shall provide staff necessary to support the continuous operation of the committee.

(b) Upon the request of the committee, the Texas Water Commission and the Texas Water Development Board shall provide staff as necessary to assist the committee in the performance of its duties.

§1.029. Water Resources Management Oversight Fees

The committee is authorized to charge and collect annual fees to be imposed on all entities subject to the jurisdiction of the committee. The committee shall set the amounts of the annual fees by rule. All fees collected pursuant to this section are to be deposited in the General Revenue Fund.

§1.030. Proceedings and Records of the Committee

The committee is subject to the Administrative Procedure and Texas Register Act (Article 6252-13a, Vernon's Texas Civil Statutes), the Open Meetings Act (Article

## Suggested Legislation

6252-17, Vernon's Texas Civil Statutes), and the Open Records Act (Article 6252-17a).

### §1.031. Elimination of Sunset Review

Contingent upon the final passage of this act and it becoming law thereby creating the Texas Water Resources Management Oversight Committee, Section 1.23 and Subsection 1.02(1)(C) of the Texas Sunset Act (Article 5429k V.T.C.S.) are repealed.

RECOMMENDATIONS 7.1 and 7.2

7.0 Recognizing that all public agencies must be accountable to the people of Texas, the Committee recommends that the legislature require all districts and authorities to adopt policies which would set standards of conduct for their employees, officials, and directors, and which would require clearer and more thorough financial reporting.

Suggested legislation to implement this recommendation:

Section 50.381 of the Water Code should be amended by deleting the existing language and substituting the following:

§ 50.381 Audit and Financial Policies for Districts and Authorities.

(a) The governing boards of all districts and authorities created pursuant to Article III, Section 52 or Article XVI, Section 59 of the Texas Constitution shall adopt, consistent with their enabling legislation:

(1) A written code of ethics for all employees, officials and directors, including investment personnel.

(2) A written policy on travel expenditures.

- (3) A written policy on investments which would ensure:

  - (a) that all purchases and sales are initiated by authorized individuals and conform to investment objectives and regulations and are properly documented and approved; and
  - (b) that periodic review be made to evaluate investment performances and security of investments.
- (4) Written policies and procedures for selection, monitoring or review and evaluation of professional services.
- (5) A uniform method of accounting and reporting on Industrial Development Bonds and Pollution Control Bonds prescribed by the State Auditor.
- (6) Policies which ensure a better utilization of management information, including:

  - (a) Budgets for use in planning and controlling cost;
  - (b) A functioning audit committee of the governing board; and
  - (c) Uniform reporting requirements which use Audits of State and Local Governmental

Units as a guide on audit working papers, and use Governmental Accounting and Financial Reporting Standards.

(b) Districts and authorities created pursuant to Article III, Section 52 or Article XVI Section 59 of the Texas Constitution shall file annual audits with the State Auditor for review and comment. The State Auditor's comments shall be filed with the Legislative Audit Committee and the governing board of the district or authority reviewed.

(c) The State Auditor may audit the financial transactions of any authority or district if the State Auditor determines that such an audit is necessary.

## APPENDICES

CONSTITUTIONAL PROVISIONS

**Article III, §52:** Counties, cities, towns or other political corporations or subdivisions; lending credit; grants.

(a) Except as otherwise provided by this section, the Legislature shall have no power to authorize any county, city, town, or other political corporation or subdivision of the State to lend its credit or to grant public money or thing of value in aid of, or to any individual, association or corporation whatsoever, or to become a stockholder in such corporation, association or company.

(b) Under Legislative provision, any county, any political subdivision of a county, any number of adjoining counties, or any political subdivision of the State, or any defined district now or hereafter to be described and defined within the State of Texas, and which may or may not include, towns, villages or municipal corporations, upon a vote of two-thirds majority of the resident property taxpayers voting thereon who are qualified electors of such district or territory to be affected thereby, in addition to all other debts, may issue bonds or otherwise lend its credit in any amount not to exceed one-fourth of the assessed valuation of the real property of such district or territory, except that the total bonded indebtedness of any city or town shall never exceed the limits imposed by other provisions of this constitution, and levy and collect taxes to pay the interest thereon and provide a sinking fund for the redemption thereof, as the Legislature may authorize, and in such manner as it may authorize the same, for the following purposes to wit:

(1) The improvements of rivers, creeks, and streams to prevent overflows, and to permit the navigation thereof, or irrigation thereof, or in aid of such purposes.

(2) The construction and maintenance of pools, lakes, reservoirs, dams, canals and waterways for the purposes of irrigation, drainage or navigation, or in aid thereof.

(3) The construction, maintenance and operation of macadamized, graveled or paved roads and turnpikes, or in aid thereof.

(c) Notwithstanding the provisions of Subsection (b) of this Section, bonds may be issued by any county in an amount not to exceed one-fourth of the assessed valuation of the real property in the county, for the construction, maintenance, and operation of macadamized, graveled, or paved roads and turnpikes, or in aid thereof, upon a vote of a majority of the resident property taxpayers voting thereon who are qualified electors of the county, and without the necessity of further or amendatory legislation. The county may levy and collect taxes to pay the interest on the bonds as it becomes due and to provide a sinking fund for redemption of the bonds.

(d) Any defined district created under this section that is authorized to issue bonds or otherwise lend its credit for the purposes stated in Subdivisions (1) and (2) of Subsection (b) of this section may engage in fire-fighting activities and may issue bonds or otherwise lend its credit for fire-fighting purposes as provided by law and this constitution.

**ARTICLE XVI, §59:** Conservation and development of natural resources; conservation and reclamation districts.

(a) The conservation and development of all of the natural resources of this State, including the control, storing, preservation and distribution of its storm and flood waters, the waters of its rivers and streams, for irrigation, power and all other useful purposes, the reclamation and irrigation of its arid, semi-arid and other lands needing irrigation, the reclamation and drainage of its overflow lands, and other lands needing drainage, the conservation and development of its forests, water and hydro-electric power, the navigation of its inland and coastal waters, and the preservation and conservation of all such natural resources of the State are each and all hereby declared public rights and duties; and the Legislature shall pass all such laws as may be appropriate thereto.

(b) There may be created within the State of Texas, or the State may be divided into, such number of conservation and reclamation districts as may be determined to be essential to the accomplishment of the purposes of this amendment to the constitution, which districts shall be governmental agencies and bodies politic and corporate with such powers of government and with the authority to exercise such rights, privileges and functions concerning the subject matter of this amendment as may be conferred by law.

(c) The Legislature shall authorize all such indebtedness as may be necessary to provide all improvements and the maintenance thereof requisite to the achievement of the purposes of this amendment, and all such indebtedness may be evidenced by bonds of such conservation and reclamation districts, to be issued under such regulations as may be prescribed by law and shall also, authorize the levy and collection within such districts of all such taxes, equitably distributed, as may be necessary for the payment of the interest and the creation of a sinking fund for the payment of such bonds; and also for the maintenance of such districts and improvements, and such indebtedness shall be a lien upon the property assessed for the payment thereof; provided the Legislature shall not authorize the issuance of any bonds or provide for any indebtedness against any reclamation district unless such proposition shall first be submitted to the qualified property tax-paying voters of such district and the proposition adopted.

(d) No law creating a conservation and reclamation district shall be passed unless notice of the intention to introduce such a bill setting forth the general substance of the contemplated law shall have been published at least thirty (30) days and not more than ninety (90) days prior to the introduction thereof in a newspaper or newspapers having general circulation in the county or counties in which said district or any part thereof is or

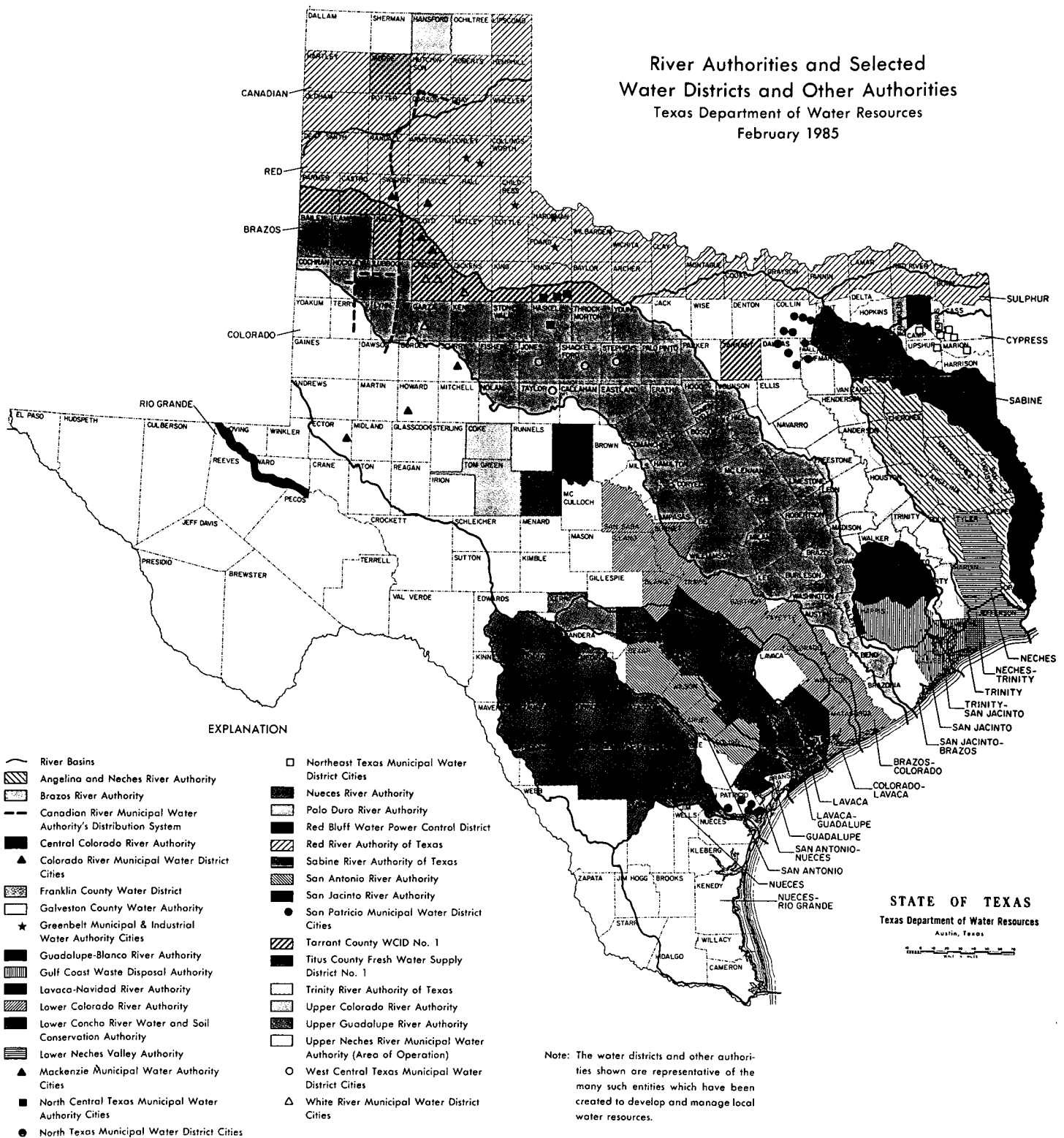


will be located and by delivery a copy of such notice and such bill to the governor who shall submit such notice and bill to the Texas Water Commission or its successor, which shall file its recommendation as to such bill with the governor, lieutenant governor and speaker of the house of representatives within thirty (30) days from date notice was received by the Texas Water Commission. Such notice and copy of bill shall also be given of the introduction of any bill amending a law creating or governing a particular conservation and reclamation district if such bill (1) adds additional land to the district, (2) alters the taxing authority of the district, (3) alters the authority of the district with respect to the issuance of bonds, or (4) alters the qualifications or terms of office of the members of the governing body of the district.

(e) No law creating a conservation and reclamation district shall be passed unless, at the time notice of the intention to introduce a bill is published as provided in Subsection (d) of this section, a copy of the proposed bill is delivered to the commissioners court of each county in which said district or any part thereof is or will be located and to the governing body of each incorporated city or town in whose jurisdiction said district or any part thereof is or will be located. Each such commissioners court and governing body may file its written consent or opposition to the creation of the proposed district with the governor, lieutenant governor, and speaker of the house of representatives. Each special law creating a conservation and reclamation district shall comply with the provisions of the general laws then in effect relating to consent by political subdivisions to the creation of conservation and reclamation districts and to the inclusion of land within the district.

(f) A conservation and reclamation district created under this section to perform any or all of the purposes of this section may engage in fire-fighting activities and may issue bonds or other indebtedness for fire-fighting purposes as provided by law and this constitution.

**River Authorities and Selected  
Water Districts and Other Authorities**  
Texas Department of Water Resources  
February 1985



### **Geographical Distribution of Water Districts**

The following maps illustrate where water districts are located across the state.

Note that only those counties having 2-3 or more districts are illustrated.

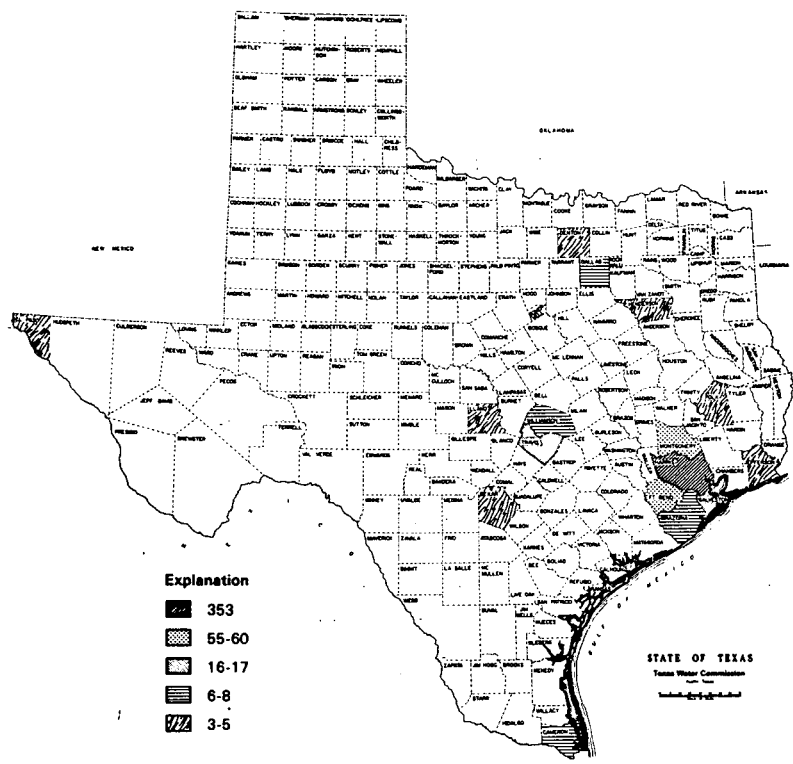
The "Explanation" on each map indicates the number of districts found in the counties shaded in.

Maps are provided for the following types of water districts:

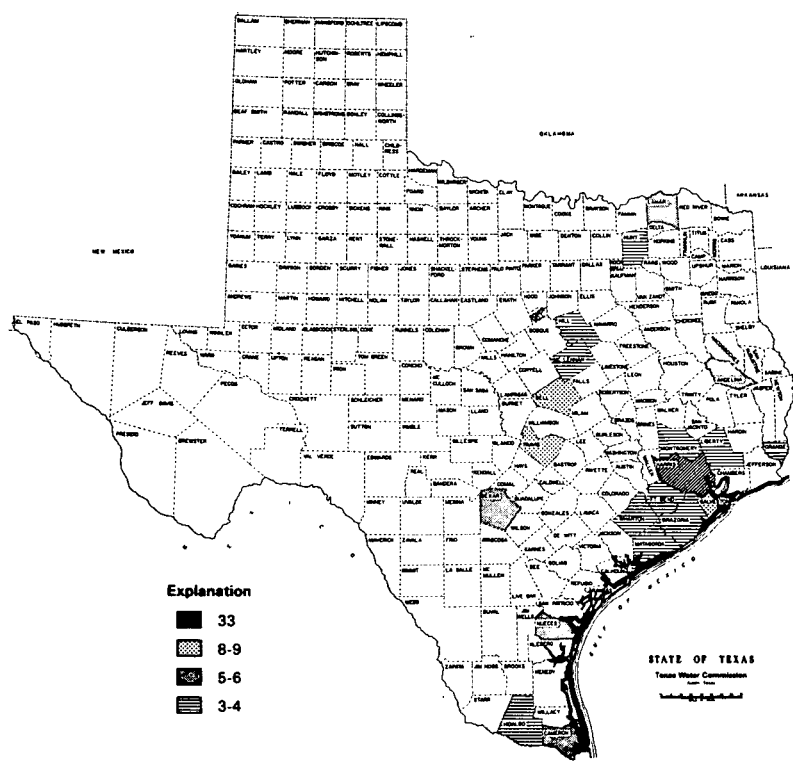
- Water Control and Improvement Districts
- Levee Improvement/Flood Control Districts
- Municipal Utility Districts
- Water Improvement Districts
- Navigation Districts
- Drainage Districts
- Fresh Water Supply Districts

Appendix C

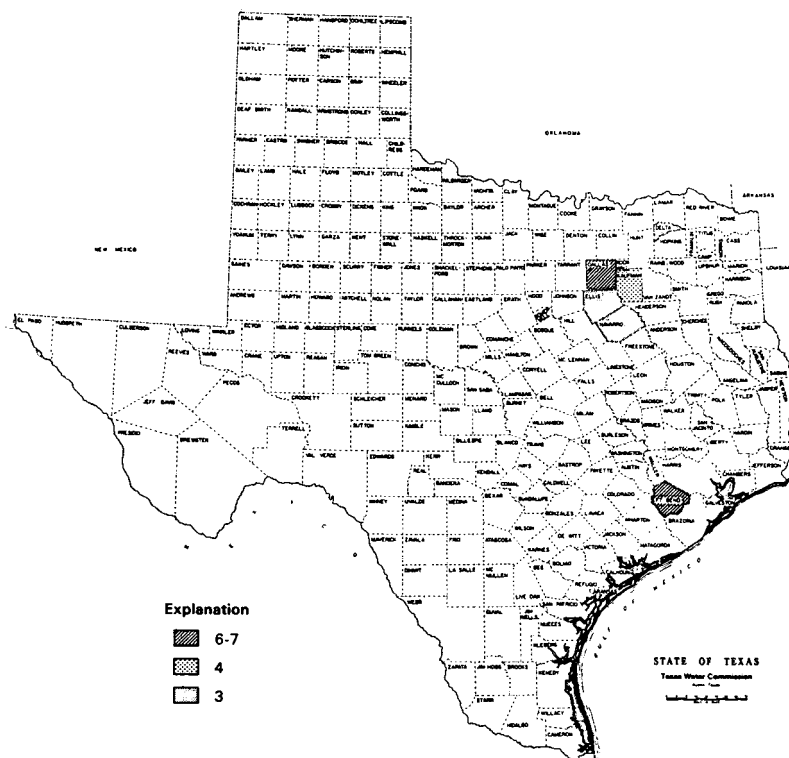
Municipal Utility Districts  
Counties With Three or More Districts



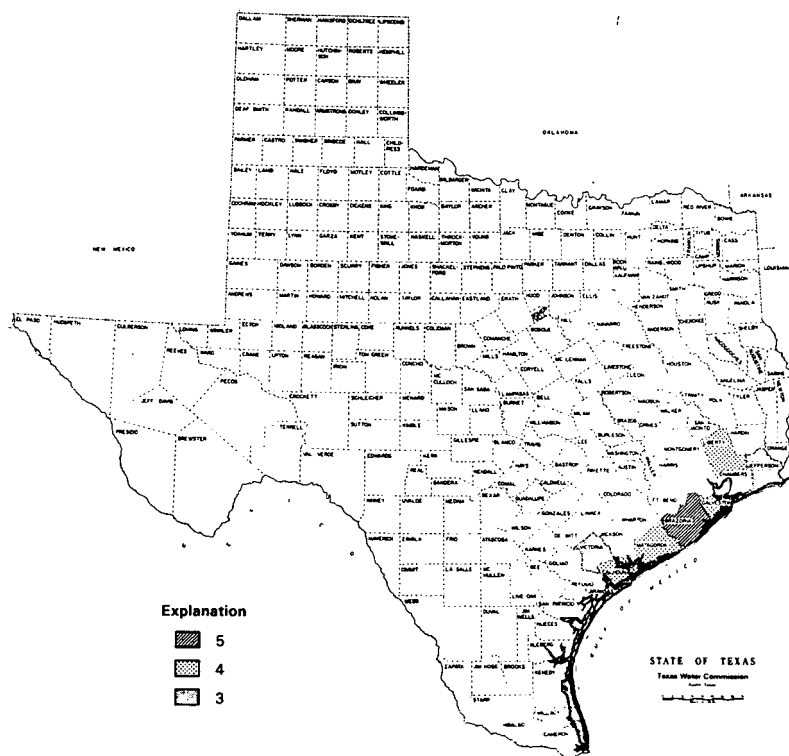
Water Control and Improvement Districts  
Counties With Three or More Districts



**Levee Improvement/Flood Control Districts**  
**Counties With Three or More Districts**

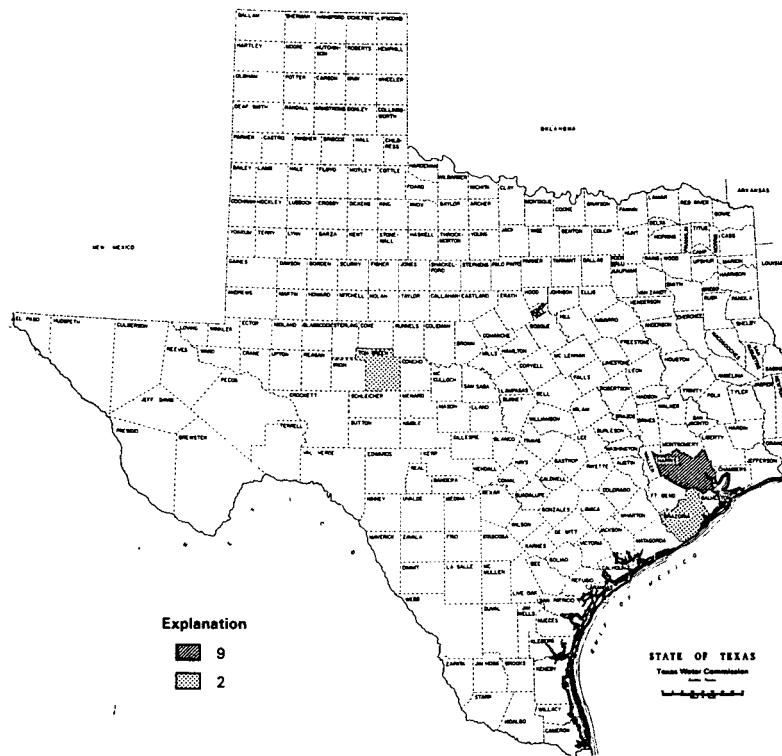


**Drainage Districts**  
**Counties With Three or More Districts**

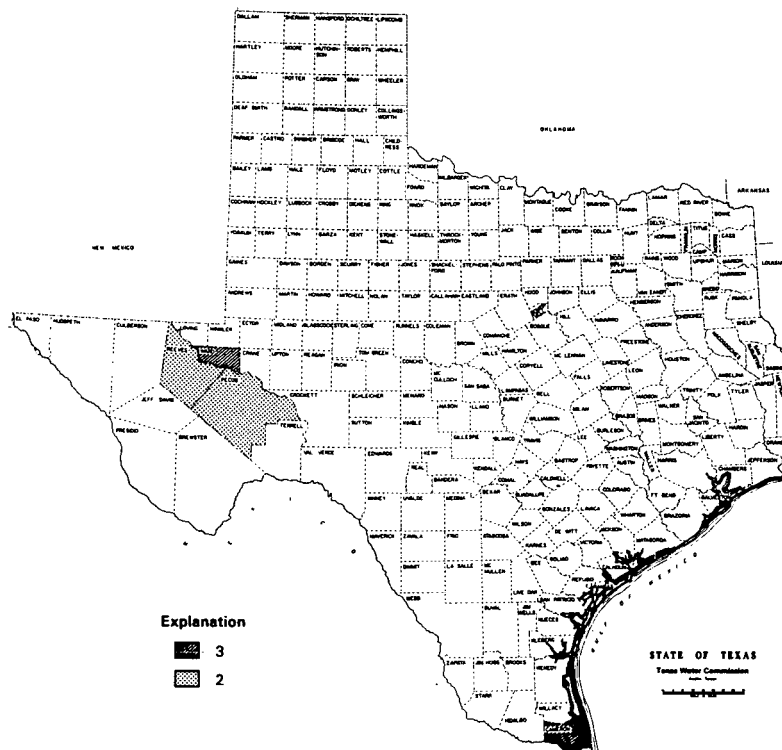


# Appendix C

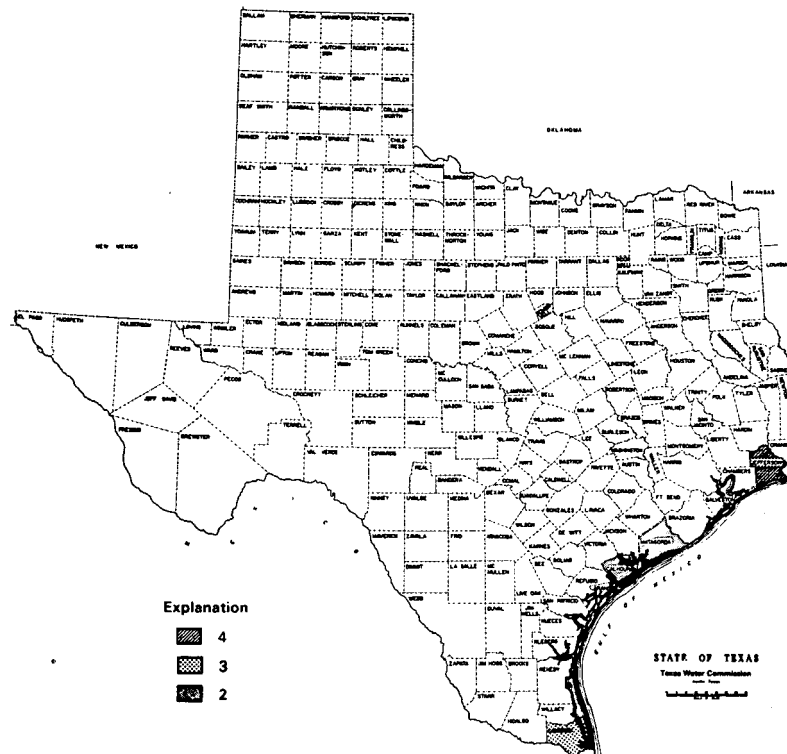
## Fresh Water Supply Districts Counties With Two or More Districts



## Water Improvement Districts Counties With Two or More Districts



**Navigation Districts**  
**Counties With Two or More Districts**



## Appendix D

The Committee heard testimony from:

Trinity River Authority

Mr. Danny Vance, General Manager

Mr. Blake Gillen, Board President

North Texas Municipal Water District

Mr. Carl Riehn, Executive Director and General Manager

Red River Authority of Texas

Mr. Ronald Glenn

Tarrant County. Water Control & Improvement District

Mr. Jim Oliver, Manager

Mr. Burford King

Mr. James Strawn

Arlington City Council

Mr. Ken Groves

Texas Committee on Natural Resources

Mr. Edward C. Fritz

Lower Rio Grande Valley Water Districts Managers Association

Mr. Larry Stevenson, President

Cameron County Fresh Water Supply District No. 1

Mr. M. M. Vicars, General Manger

Mr. H. N. Hudson

Duval County Conservation and Reclamation District

Mr. Don Rehmet, Consulting Engineer

Hidalgo County Irrigation District No. 1

Mr. Bill Goldsberry, Manager

Hidalgo County Water Improvement District

Mr. J. R. Cook, General Manager

Starr County Water Control and Improvement District No. 2

Mr. Efrain Duran

Mr. James T. Smith, Hydrologist

Angelina-Neches River Authority

Mr. Charles Thomas, Deputy Director



## Appendix D

The Committee heard testimony from (continued):

Lower Neches Valley Authority

Mr. Josiah Wheat, General Counsel

Mr. Joe Broussard, Board President

Mr. Tommy Hebert, Assistant General Manager

Northeast Texas Municipal Water District

Mr. Homer Tanner, Manager

Sabine River Authority

Mr. Sam Collins, General Manger

Upper Neches River Municipal Water Authority

Mr. Roy Douglas, Manager

Mr. H. T. Bell, Landowner

Rio Grande Watermaster, Texas Water Commission

Mr. John Hinojosa

Donna Irrigation District, Hidalgo County No. 1

Mr. Bill Green, General Manager

Lavaca-Navidad River Authority

Mr. W. R. Farquhar, General Manager

Guadalupe-Blanco River Authority

Mr. John Specht, General Manager

Lower Colorado River Authority

Mr. Martin McLean, Board Chairman

Mr. S. David Freeman, General Manager

San Jacinto River Authority

Mr. Jack Ayer, General Manager

Nueces River Authority

Mr. Con Mims, General Manager

Canyon Lake Area Citizens Association

Ms. Lois Duggan

Dewitt-Gonzales River Association

Mr. Linda Barth

Mr. Alton B. Sawey

Water Rights and Uses Division, Texas Water Commission

Dr. Harry Pruett

The Committee heard testimony from (continued):

El Paso County Water Improvement District No. 1  
Mr. Edd Fifer, General Manager

Colorado River Municipal Water District  
Mr. Owen Ivie, General Manager

Canadian River Municipal Water Authority  
Mr. John C. Williams, General Manager

High Plains Underground Water Conservation District No. 1  
Mr. Wayne Wyatt, General Manager

North Plains Water District  
Mr. Orval Allen, General Manager

Panhandle Ground Water Conservation District No. 3  
Mr. Richard Bowers, Manager

West Central Texas Municipal Water Authority  
Mr. Ed Seegmiller, Chief Executive Officer  
Mr. Jerry Johnson, Member of the Governing Board

Galveston County Water Authority  
Mr. J. A. Willhelm, General Manager

Gulf Coast Waste Disposal Authority  
Mr. Frank M. Fisher, Jr., Board Chairman  
Mr. Jack Davis, General Manager

Brazos River Authority  
Mr. Bruce Campbell, Board President  
Mr. Carson Hoge, General Manager

Harris-Galveston Counties Coastal Subsidence District  
Mr. Jim Box, Board Chairman  
Mr. Ron Neighbors, General Manager

Johnson County Fresh Water Supply District  
Mr. Jack Guthrie, Board President

Association of Water Board Directors  
Mr. Joe B. Allen

El Paso Water Utilities, Public Service Board  
Mr. Daniel Knorr, Engineer

Bandera County River Authority  
Mr. Don E. Karr

## Appendix D

The Committee heard testimony from (continued):

Central Colorado River Authority  
Mr. Rob Chaney

Edwards Underground Water District  
Mr. Thomas Fox

San Antonio League of Women Voters  
Cathy Liu Scott

Lower Concho River Water and Soil Conservation Authority  
Mr. Ben Sims, Chairman

San Antonio River Authority  
Mr. Fred Pfeifer, General Manager

Upper Colorado River Authority  
Mr. Everett Grindstaff

Upper Guadalupe River Authority  
Mr. B. W. Bruns, General Manager

Alamo Area Council of Governments  
Mr. Aloys Notson

Texas Water Development Board  
Dr. Herb Grubb, Director of Planning

Texas Water Commission  
Mr. Larry R. Soward, Executive Director

Ms. Mary Arnold

Sierra Club  
Mr. Ken Kramer

Lower Rio Grande Valley Water District Managers Association  
Mr. Glen Jarvis

Brownsville Irrigation District  
Mr. James Webb, Manager

National Audubon Society  
Mr. Murray Walton, Southwest Regional Representative

Hidalgo & Cameron Counties Irrigation District No. 9  
Mr. Clinton Faseler, General Manager

The Committee heard testimony from (continued):

League of Women Voters of Texas  
Ms. Catherine Perrine

Texas Water Alliance  
Mr. Steve Stagner, Executive Director

State Auditor's Office  
Ms. Lynn Redwine, Assistant State Auditor

Written testimony was provided by:

City of Huntsville  
Mayor Jane Monday

The Honorable Roy Blake, Texas Senate

City of Temple  
Mayor John Sammons

Greater San Antonio Chamber of Commerce

Lieutenant Governor Bill Hobby

Sierra Club, Lone Star Chapter  
Mr. Ken Kramer, State Capital Representative  
Ms. Mary Lou Campbell; Member, Water Resources Committee

The Honorable Jerry Yost, Texas House of Representatives

Mr. Brandt Mannchen

Mr. Robert McFarlane, Environmental Consultant

Dallam County Underground Water Conservation District No. 1  
Mr. Glenn Olson, Board President

League of Women Voters of Texas  
Ms. Catherine Perrine

State Auditor's Office  
Mr. Barnie C. Gilmore, CPA, Audit Manager

High Plains Underground Water Conservation District No. 1  
Mr. A. Wayne Wyatt, General Manager

Lower Rio Grande Valley Water District Manager's Association  
Mr. Glenn Jarvis, Attorney

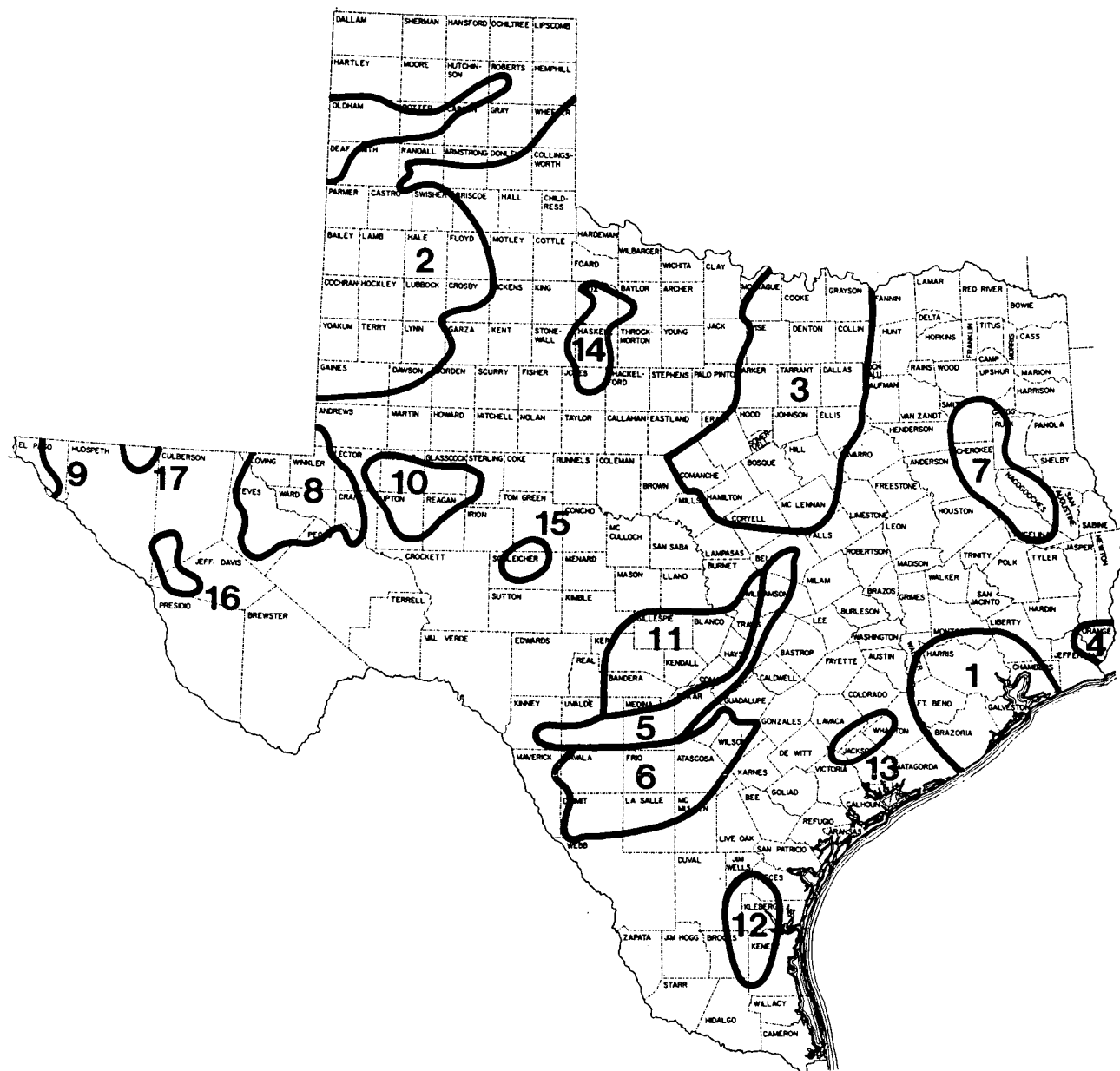
## **Appendix D**

Written testimony was provided by (continued):

North Plains Water District

Texas Water Conservation Association

Texas Water Development Board



Texas Critical Areas